SUMMER EDITION

1931

AMAZING STORIES

QUARTERLY

50

The Blue Barbarians

by Stanton A. Coblentz

Deep Sea Justice

by Ed. Earl Repp

VOL. 4—NO. 3
SUMMER, 1931

AMAZING STORIES

Quarterly

CONTENTS

The Blue Barbarians 290
By Stanton A. Coblentz
Illustrations by WESSO

Half-Mile Hill 371
By David H. Keller, M.D.
Illustration by MOREY

Menace of the Little (A novelette) 378
By Roscoe B. Fleming
Illustrations by MOREY

Through Intervening Space (A poem) 407
By W. T. B.

Cosmic Menace 408
By A. W. Bernal
Illustration by MOREY

Deep Sea Justice 414
By Ed Earl Repp
Illustrations by MOREY

The Giant Puffball 429
By Eugene Stowell

Editorials from Our Readers 431

Your Viewpoint 432

Our Cover

of this issue depicts a scene from the story entitled "Cosmic Menace," by A. W. Bernal, in which the earth is seen flying from its orbit after the tons of atomite are released in the pits in Brazil, which were specially prepared for the discharge.

Cover Illustration by MOREY

July 20, 1931

Published Quarterly by Radio-Science Publications, Inc., *Jamaica, N. Y.*
EDITORIAL AND EXECUTIVE OFFICES
381 FOURTH AVENUE, NEW YORK CITY, N. Y.

OFFICERS

W. Z. Shafer, *President*
G. L. Harrington, *Vice President*
Laurence A. Smith, *Treasurer*
Byrd D. Wise, *Secretary*

Entered as second class matter at the Post Office at Jamaica, N. Y., under the act of March 3, 1879. Copyright, 1931, by Radio-Science Publications, Inc. All rights reserved. Title Registered at the U. S. Patent Office. Printed in the United States of America. The contents of this magazine must not be reproduced without permission. We cannot be responsible for lost manuscripts, although every care is taken for their safety.

50c a Copy, $1.75 a year, $2.25 in Canada and Foreign Countries. Subscribers are notified that change of address must reach us five weeks in advance of the next day of issue.

The Blue Barbarians

By Stanton A. Coblentz

Author of "After 12,000 Years," "The Ice Reclaimers," etc.

CLEVER satire always makes excellent reading. Mr. Coblentz's stories, in addition to being clever satirical studies, always gave us, at least, the feeling that somehow he was having a lot of fun at our expense. True, he writes about the world—in fact, he takes us to another planet—in the year 800,000. But so many times we get an uncannily distinct feeling of strange familiarity—yet everything in the novel is vastly different from anything we know about today. And the story our author tells us is not about us human beings. "The Blue Barbarians" (and that is exactly what they are), although written distinctively in the Coblentz manner, has a touch of Dean Swift. This is undoubtedly the best story we have published by this well-known author. It is thought-provoking, contains a lot of science, and is easily worth two readings. In short, it is a good example of typical classic scientific fiction and we recommend it to you.

Illustrated by WESSO

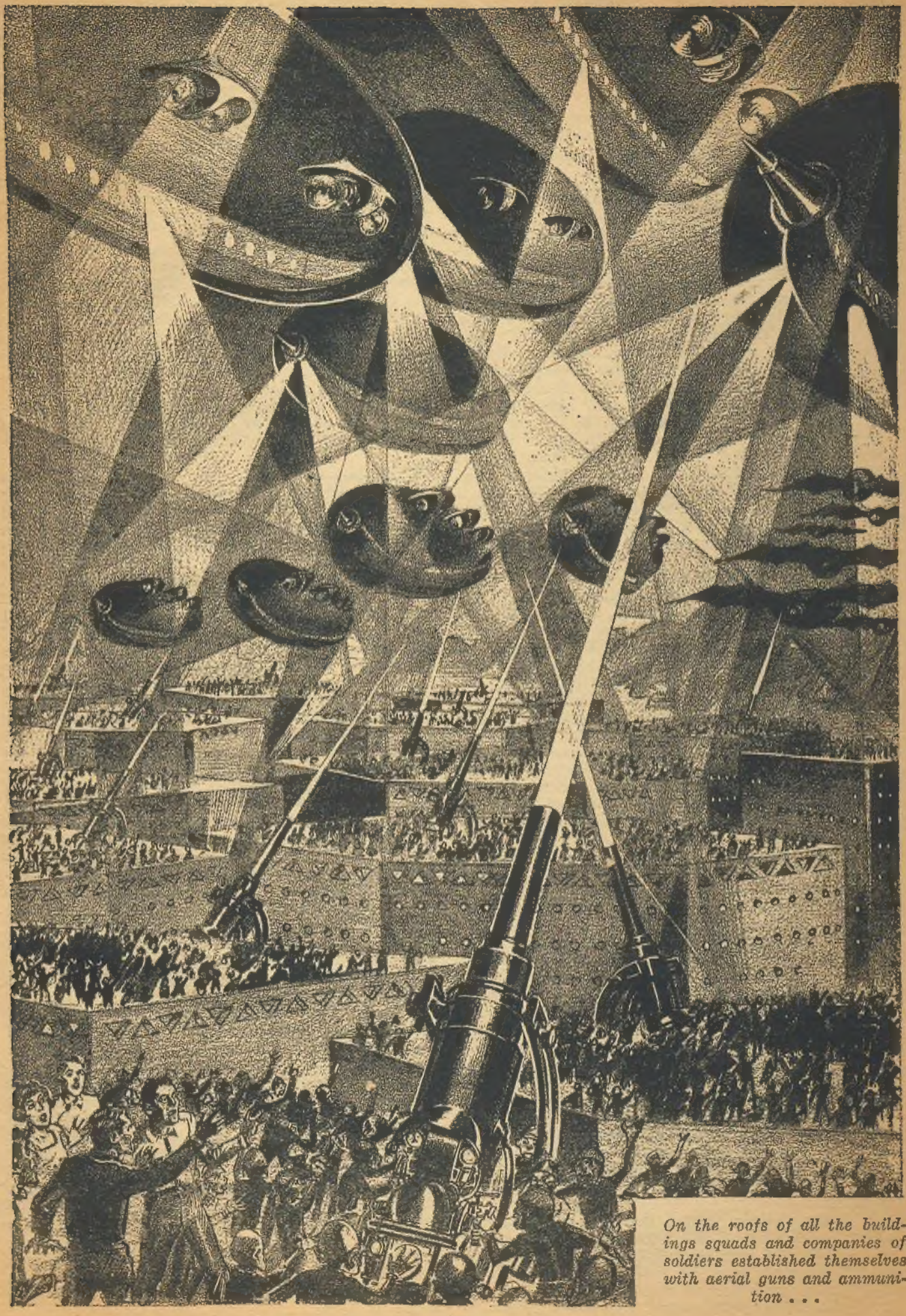
Introductory Note

IN reporting the adventures of Erom Reve, I am unable to guarantee the authenticity of every statement. Future history must necessarily be difficult to verify; and when, as in the present case, the events are not to be enacted for the next eight hundred thousand years, it becomes slightly less than probable that either the narrator or any of his readers will be able personally to test the facts. Yet the story of Erom Reve impresses me as at once so extraordinary and so worthy of credence that I cannot refrain from presenting it for whatever it may be worth.

It was at a séance conducted by the famous medium, Madame Adéle Fabrique, that I first entered into communion with the soul of Erom Reve. I do not know what impalpable influence it was that first brought us into contact, with subtle although indefinable harmony of spirit, what singularly propitious confluence of the waves and vibrations of thought; but I do know that, in the deep, charmed sleep to which the medium consigned me, I found myself in contact with the soul of a man not to be born for ages yet, found myself conversing with him volubly and intimately, found him delivering into my ear a message and a narrative which he bade me report for the benefit of mankind.

Out of the ineffable mists and the darkness of the spirit world, out of the fog and distance of that Land Before Birth which is one with the Land After Death, the soul of the unknown came to me in a slumber, perhaps not less profound than my own, and in slumber prophesied to me his astounding future, when he would take bodily form and undergo the strangest adventures it would ever be given mortal man to endure. In the voice of this spirit, as he conversed with me in an indescribable tongue of silence more eloquent than speech, there was an urgency and appeal that I could not disregard; and, turning from all other pursuits as by an irresistible summons, I devoted myself with insistent and unwonted energy to recording the message so weirdly confided to me.

As I worked, it seemed almost as if the spirit of Erom Reve hovered at my side, aiding me, encouraging me, breathing its own strength into me, stirring me to renewed effort when my enthusiasm flagged, and forcing me on with great waves of indignation or anger, when my labors showed signs of abating; and somehow, by a subtle yet potent psychic suggestion, it fanned into vivid life my memory of even the most detailed revelations, so that I was able to record them rapidly and with substantial accuracy. While the facts herein reported must for ages remain unverified, I trust that the reader will accept my statement that the only change I have consciously made is to convert the future tense of the original prophecy to the past of



On the roofs of all the buildings squads and companies of soldiers established themselves with aerial guns and ammunition . . .

normal narration; and I earnestly hope that the history of Erom Reve will be followed in that open-minded and receptive mood which has been forced inescapably upon the writer.

S. A. C.

New York, 1928.

CHAPTER I

An Outline of Future History

IN the Eight Hundredth Millennium, conditions of life upon the earth had become intolerable. It was now some scores of thousands of years since the sunlight had been described as warm, and a quarter of a million years since the great northern and southern glacier belts had begun to converge about the Equator. Five hundred thousand years ago the last feeble sputtering volcanic eruption had announced the ending of the earth's internal energies; some hundreds of centuries later astronomers had begun to detect the first ominous reddish tinge about the solar light. The historians of antiquity tells us how, in the course of uncounted generations, the most pessimistic theories and predictions had become confirmed fact, so that scientists had gradually been forced to the conclusion that the sun was losing its heat and power; that it was waning from a bright yellow to a smoldering red, and was soon to join those dark and frozen stars that drifted like derelicts about the midnight of space.

Even as yet, of course, the disaster had not advanced beyond the premonitory stage. While a faint red film had overspread the solar disk and visibly diminished the solar energy, millions of years must yet elapse before the sun's blinded eye should blink for the last time, and its last faltering flicker be delivered into the outer darkness. Considered merely as an astronomical phenomenon, the change was no greater than that which an individual undergoes in passing from his fifty-ninth year to his sixtieth. Yet its reaction upon the human race had been cataclysmic; it had driven man to the very walls of existence, and had excluded him not only from the polar regions, but also from those milder climes once regarded as temperate.

It is disheartening to recall how small a part of the earth's surface was occupied by man in the Eight Hundredth Millenium. Although his habitat had been restricted for many thousands of years, there had been a time when he had occupied the five continents and most of the islands of the world; when his teeming myriads had swarmed from above the Arctic circle almost as far south as the Antarctic, and when the members of the human race had numbered well in excess of a billion and a half! That era of widespread population, of course, was a very primitive as well as a very ancient one; it had ended ages ago, before the first Decade of Intelligence; and only the most meager records of that aboriginal epoch have been transmitted to us of the Eight Hundredth Millenium. It is not even known with certainty how long ago the primeval period ended; geologists and archeologists have long debated the question with many words and little proof; and while the conservatives hold that the prehistoric savages disappeared so late as eight hundred thousand years ago, the more daring maintain that over a million years have passed since the end of the pristine darkness.

It seems unlikely, indeed, that the actual date of the Age of Smoke and Blood (as that era is popularly designated) will ever be definitely ascertained. Out of the uncertain hazes of myth and tradition, only a few facts stand forth in clear-cut outlines: it is believed that there existed certain more or less prominent nations known as America, Great Britain, France and Japan, though such minor details are no longer capable of verification. All that is known is that the barbarians of the time, unable to live in that state of mutual forbearance and sympathy which is the mark of the civilized, plunged into orgy after orgy of destructiveness, and thereby succeeded in ridding the earth of their presence. Of the final disaster (if disaster it can be called) neither tradition nor archaeology has much to tell us; it is thought that there arose a great conflict, in which virtually all the peoples of the time were involved; that a lethal gas, originated with diabolical ingenuity, was employed extensively by both factions, and proved so efficient as to annihilate both simultaneously. Not only the millions of combatants but the hundreds of millions of civilians were asphyxiated overnight; and only by accident did any human being survive. But secluded in certain of the South Sea islands, remote from the scene of conflict and apparently too insignificant to be noticed, dwelt a number of tribes contemptuously designated "savages"; and these it was who, possibly through an oversight, were spared on the Day of Judgment, and survived to propagate the race populating our planet today.

THE history of that people is legendary and it is needless to recount it here. It is known how they remained in their tropical home for a period estimated at scores of thousands of years; how gradually, though in a leisurely, unhurried fashion, they developed a civilization and overspread the temperate climes; how they perfected themselves creatively, and numbered art among the chief ends and enjoyments of life; how their scientific achievements, though never subverted for purposes of destruction, outrivalled even those of their barbarous predecessors; how they remained free of stringent political restraint, and yet scarcely knew the meaning of the word dissension, since they did not allow themselves to grow too numerous for safety; and how, beyond question, they would have persisted in ease and contentment till the end of time had it not been for their altering physical environment and the slow and stealthy encroachment of the Polar cold.

By gradations so slight as to be imperceptible save through the eons of history, the inhabitants of the northern hemisphere were pushed southward by the deepening drifts of snow and the widening walls of ice; and simultaneously the men of the southern hemisphere were driven northward. By the Seven Hundredth Millennium no human habitations were to be found beyond those regions once known as Tropical and Semi-Tropical; and by the Seven Hundred and Fiftieth Millennium, even the Semi-Tropical realms had been deserted; while the opening of the Eight Hundredth Millennium found man gasping for life along that narrow equatorial belt still immune from the everlasting frosts. Again and again, in the effort to forestall the inevitable, the human species had been decimated through control of the agencies of birth; but while the population of the planet had now reached an irreducible minimum of twenty or thirty thousands, it was with difficulty that adequate food and clothing could be coaxed from those cold and barren plains where once the torrid jungles throve. Materialists pointed out, it is true, that the stores of food might be augmented by the flesh of the reindeer and of the polar bear, which had flourished and overspread the planet while other species were approaching extinction; but it was now seven or eight hundred thousand years since man had been carnivorous; and it was certain that, even if the human appetite could accommodate itself to the nauseous fare of our remote ancestors, the human digestive system could no longer endure the strain.

But while scientists vainly diagnosed the symptoms and debated the remedies, the earth's two great ice-caps continued ominously on their equatorial course, like blind murderous hands reaching out slowly to throttle their victim. Though science had done all in its power to fertilize the soil and to enhance agricultural efficiency, yet science had not learned how to make artificial food; and it was now a mere calculable matter of centuries before the advancing cold should spread its blight over the few remaining farming districts, and the worn-out soil should yield its final grain of wheat. When that time arrived—and that its arrival was appallingly near was admitted even by the most optimistic—humanity with all its age-old yearnings and struggles would lapse back into the eternal silence.

It was in realization of the menace that men of vision began to look beyond the earth for the possible perpetuation of earthly life. Might there not be some other planet, some other world among all the countless hosts of space, to which men could transplant himself and on which he might endure throughout the eons to be? Obviously, to look beyond the Solar System was futile, for the distances would prove too vast even if our knowledge were not still too limited; but the eight or nine planets revolving about our sun were well known to astronomers, and it was at least conceivable that one of them might offer a haven. Jupiter and Saturn, of course, were not open to consideration, for the sheer pressure of gravitation on their surface would crush a man; Uranus and Neptune and the planet beyond Neptune would likewise have to be disregarded, for their distance from the sun would disqualify them even if their size did not; Mars was impossible since it had long ago become moribund; and shrivelled Mercury, with one baked face turned always toward the sun and one frozen face always confronting the darkness of infinity, showed no sign of being able to support human life. Consequently, the only world that offered any temptation was the earth's sister planet, Venus, still the "Jewel of the Evening Skies" and the inspiration of romanticists and poets; and it was upon Venus, accordingly, that scientists based their solitary hope.

From the first, the prospects afforded by Venus were of the most favorable. Here was a world approximately of the earth's size, and yet situated twenty-five or thirty million miles nearer the sun, so that even today it would probably receive as much heat and light as the earth absorbed a million years ago. That it had an atmosphere was evident from the dense clouds hovering above its surface; that the atmosphere contained oxygen and water vapor had been ascertained from spectroscopic observations; and the general view was that its condition corresponded closely with that of the earth at the beginning of the First Millennium. There was little doubt among astronomers that, if man could but traverse the intervening tens of millions of miles, he would find Venus a safe and suitable home.

But how cross that gigantic abyss? For scores of generations the world's most skillful physicists and inventors had been subsidized by the government to study the problem; and although at first the obstacles had appeared insurmountable, yet by the dawn of the Eight Hundredth Millennium the difficulties seemed well on the way to solution. It was in the seventeenth year of that Millennium that the great African genius Daru Peak originated his famous Radio-Gun, which succeeded not only in discharging an enormous projectile from a mountain top, but in directing it by radio-electrical waves, until, through telescopic observation of the ensuing upheaval, it was known to strike the surface of the moon. The immediate effects of this invention were, of course, insignificant, but its indirect results were overwhelming, for the world was now thoroughly aroused, and Daru Peak's device was studied and improved by so many scientists that within a few decades the goal appeared within reach.

There are men now living who recall the furor aroused by the mathematician, Page Ram, when, in the fifty-third year of our Millennium, he announced plans for directing a projectile to the surface of Venus. Even to this day the world has scarcely recovered from the frenzied eagerness with which it awaited the world's next conjunction with her neighbor, when the widely heralded computations might be put to the test. The results, of course, are now too well known to require comment: it is to the eternal glory of science that Professor Ram's theories proved capable of practical demonstration, and that a projectile launched in accordance with his directions ended its flight on the surface of Venus. While atmospheric interferences rendered detailed observations difficult, yet the tests of the year fifty-four left little doubt as to the possibility of interplanetary travel.

THE sole remaining problems were of a secondary nature. The release of inter-atomic energy would discharge a projectile at sufficient speed to overcome the earth's gravitational power; the use of a peculiarly hard metallic alloy, not less than the fact that the point of departure was a high mountain peak, would minimize the terrific friction of the air; and radio-electricity would serve to guide the projectile during its flight. It had been proved possible, moreover, to utilize a shell large enough to accommodate two or three men equipped with several months' provisions; and it had been demonstrated that oxygen tanks and tubes could supply the inmates with sufficient air and maintain an adequate atmospheric pressure. The chief question was that of a successful landing, for if, as was to be anticipated, the projectile should strike the outer atmospheric envelope of Venus at a speed of from twelve to twenty miles a second, the occupants would be none too likely to arrive in safety.

It was at this point that Page Ram again came to the rescue. The projectile, he insisted, need not be launched directly at the planet; rather, it should be directed through space at such an angle that it would approach the planet very closely, and accordingly be subject to a gravitational pull that would interrupt its flight and force it to revolve about Venus as a satellite. Thereafter, at their leisure, the occupants might release themselves by means of specially contrived parachutes equipped with powerful vibrating electric wings; and with the aid of such flying machines the adventurers might overcome not only the force of gravitation but the speed of the revolving projectile, and alight with comparatively little risk upon the surface of our neighbor world.

It was one of the red-letter days of history when, in the year seventy-six, the Worldwide Interplanetary Commission completed its two decades of investigations and tests, and not only announced its endorsement of Page Ram's plans but issued a call for volunteers to make the contemplated flight to Venus. Yet the hazards of the undertaking, as the Commission pointed out, were far from negligible: through some incalculable contingency the volunteers might never reach the surface of Venus, or else might reach it only as corpses; and even if they did arrive uninjured, they could not hope ever to return to the earth. Under such circumstances, no man would be urged to embark upon the adventure against his will; and only the grave and paramount issue involved made it advisable even for the volunteers to risk their lives.

Despite the warnings of the Commission the response to its announcements was so enthusiastic as to be almost embarrassing. It speaks much for the calibre of the world's citizenry that three out of every four young men

and women should have offered themselves for the flight to Venus (women now being equal to men in all things), and that scores even of the older folk registered for service under the Commission. The difficulty now was not, as had been anticipated, to find suitable persons for the experiment; the difficulty was to make the best choice from among the hundreds of promising applicants; and it is therefore not to be wondered that several months elapsed before the Commission completed its deliberations. In the end, however, it decided in favor of two men whose names are now world-famous: Sani Par, the eager young inventor of the wingless flying machine, and Raii Lordo, the clever mechanic who had assisted Daru Peak in his discovery of heatless light.

During the excited months of anticipation that preceded that first cruise of interplanetary exploration, the prospective adventurers were equipped, among other things, with a powerful radio apparatus, so that they might communicate to their friends on earth not only the facts of their flight, but their experiences after reaching their destination. Thus their efforts might not be in vain, and through their sacrifice mankind might test definitely the advisability of a world-to-world flight.

To the accompaniment of universal prayers and applause and many a tear and sigh from the disappointed and the timorous, the two young explorers completed their preparations and allowed themselves to be hurled into the terrible cold and vacancy of space. For some hours after the event, all the world's telescopes were focused upon the receding projectile, which went hurtling away at prodigious speed, until it was lost to view amid the hazes of distance. Simultaneously, every radio device on earth was attuned to receiving messages from the adventurers; and few were those that were attuned in vain, for on the following day a brief but reassuring message announced that Par and Lordo were safe and "traveling in great style." On the second day, a similar report was recorded, and on the third day the welcome news continued; and so on every day for the succeeding five or six weeks.

Then abruptly, as the wanderers announced themselves to be "almost within touching distance of Venus," the communications ceased. In vain did the listeners at the radio strain their ears; not a word, not a murmur issued from the Unknown. Days passed, weeks passed, months passed—men turned to one another with ghastly faces and unspoken questionings—and still the silence continued. What had happened, what unexplained catastrophe out in those mysterious deeps of space? Had the men ever reached the surface of Venus? Or had they reached it scorched and mangled? Or had they arrived safely only to be slain by the barbarous natives? Many were the theories whispered from tongue to tongue, and many the heads that nodded sadly and without hope; but still the silence continued, and when at length the revolving year brought the anniversary of the departure, two lonely wreaths above unfilled graves announced the world's tribute to its lost heroes.

One might have thought that this experience would have kept the eyes of men for all time from the dazzling orb of Venus. But such is man's illogical persistency that the world's appetite was only whetted by the sense of mystery and danger; and the applicants for the second expedition outnumbered those for the first. Among the volunteers were many who declared that, given the opportunity, they would not only reach the surface of Venus but would find Par and Lordo still alive; and it was largely in the hope of news from the missing ones that the reluctant Interplanetary Commission consented to a second flight before further tests had been made. And as the human agents of the experiment it selected Kaye Linney and Drayon Trop, hardened travelers and mountain climbers, conspicuous for their energy and endurance.

It was not until the year eighty-one that the Commission announced its readiness for the second trial; and it was not until late in eighty-three, when Linney and Trop had been absent a full twelve months, that it officially conceded the second failure. The facts, according to reliable evidence issuing from scores of sources, were strikingly similar to those of the earlier experiment: for forty days or more after the explorers' departure, regular and cheerful although necessarily brief reports had been received; then, with appalling suddenness, the messages ceased, ceased utterly and decisively, and the adventurers were lost beyond sight or beckoning in a void as blank and unresponsive as a tomb. The passing days brought no hope to the impatient, helpless watchers on the earth, and when finally another year had drifted by, two more wreaths found themselves side by side with those of the martyred Par and Lordo.

But if by now the mystery had become insoluble, the next two decades were to develop it to bewildering proportions. Regularly, at intervals of three or four years, new expeditions had been launched, until they numbered seven in all; and invariably the result had been the same. For a while all would seem to go well, and the world would warm itself to a temporary optimism; then sudden silence would ensue, and that silence would become perpetual. All in vain would mathematicians examine and re-examine their computations, and all in vain would astronomers survey and re-survey the details of the projectile's flight: no matter what improvements were suggested, no one could discover anything wrong in essentials. It was just as if some sardonic superior power had intervened, signifying to man that he must not trespass beyond the allotted limits of this globe. For once the human intellect had been routed; and as the visible manifestation of man's failure, half a score of new-laid wreaths reposed by the side of the original four in the Cenotaph of Lost Explorers.

It was in the hundred and fourth year of our Milennium that the Interplanetary Commission consented to an eighth and last attempt upon the still-elusive coast of Venus. And then it was that I, Erom Reve, who theretofore had led a secluded, uneventful life, was selected by the Commission as one of the two volunteers privileged to dare the Unexplored and to risk my all on one of the most mysterious and momentous and terrible adventures it had ever been the lot of man to attempt.

How I prepared myself for the flight, and how I set forth, will make a narrative worthy of a separate chapter.

CHAPTER II

Arming Against the Unknown

IN the year one hundred and four, when the Interplanetary Commission favored me out of all the hundreds of applicants for the flight to Venus, I was a trifle over twenty-seven years of age. Considering how little I had to recommend me for the adventure, I still have difficulty in understanding what freak of destiny or chance gave me the coveted prize. When I volunteered some months before, I had felt about as much prospect of success as if I had held a ticket in a lottery; and now, when I was receiving the congratulations of friends and reading in bewilderment their faces of enthusiasm and envy, I asked myself again and again whether it were not all a mistake, whether some name other than mine had not been intended. True, I had youth in my favor, but so had hundreds of the disappointed; true, I was without dependents or close relatives to regret my loss, but this also had been the case with many of my rivals; true, I had couched my letter

of application in importunate terms, but doubtless I had been no more importunate than my competitors. Asking myself dispassionately the reason for my selection, I concluded that it was first of all because my training as a chemist and chemical instructor at Ulum University had given me a certain necessary scientific equipment; secondly, because my prize-winning essay on the efficient control of inter-atomic energy had afforded me a prominence out of all proportion to my merits; and, thirdly, because I was physically of a robust build, and, as an athlete at college, had demonstrated myself to be a man of prowess and endurance.

Beyond this, according to persistent unofficial reports, there was perhaps something of a sentimental reason for my selection. It was known that I had been a fervent admirer of Ardu Twell, one of the gallant young women who had disappeared on the expedition three years before. I will not say that I was exactly in love with her; but never in my life had I felt so utterly wretched, as when she had been selected for the interplanetary cruise; and never had I received such a shock as when the messages from her had ceased, and she, like her predecessors, had vanished in space.

Years had passed since then; but I still recalled the tears that had marked her face at the moment of parting; and perhaps even now my own eyes were a little moist, as I thought of the possibility of meeting her again on Venus. Considering the great public cause at stake, my thoughts certainly were too much upon Ardu when the news of my selection reached me. I remembered her as I had known her ever since childhood; how she had coquetted with me for nearly a dozen years, laughing in my face whenever I dared express a serious sentiment; how she had flitted with streaming brown hair through the astro-physical laboratory of Ulum University, performing scientific marvels while flirting like any dancing girl; how her vivid black eyes seemed to bore their very way through me, leaving me spellbound beneath her masterful, lightning will, until I wondered how the ancients could ever have considered woman the weaker sex. I must admit that I trembled before her as never before any man; yet in the end I should doubtless have won her (or she have won me, since it is the women that do all the winning nowadays), had it not been for the evil decision of the Interplanetary Commission in severing me from her forever. Or perhaps it would not be forever; perhaps (unlikely as it seemed) she had escaped the doom we dreaded, so that the Interplanetary Commission was but playing the part of fate in selecting me for the trip to Venus.

But in spite of the dim hope of seeing Ardu again, the thrill of success was not so great as I had anticipated. When I had recovered from my first dazed surprise, my chief sensation was a numb dread, a shuddery premonition as of approaching catastrophe. I really do not know how to explain this feeling; but no sooner had my vague and luminous hopes solidified into imminent possibility than they were somehow tarnished; and while I was being publicly commended for my fine spirit and my bravery, privately I felt like the braggart who has verbally slain countless bears, when, much to his alarm, an actual beast looms in sight. Perhaps it was the sight of the fourteen doleful wreaths that filled me with misgivings; perhaps it was the thought that I was about to leave the only world I or my forebears had ever known, and that there would be no returning; but, whatever the explanation, I felt all the anticipatory nostalgia of one about to descend into permanent exile. Every clod of this battered old earth now endeared itself to me strangely; there was a new significance, almost a beauty about the very clouds of dust, where blew the sole material remains of lost generations; I would linger in revery over a blade of grass, a pebble, an ear of corn, bidding a mental farewell and wondering when next I should view their like; and in the habitations of man I found a new magnificence and meaning.

FORTUNATELY, I had not much time for melancholy reflection. For months the preparations for the journey occupied most of my waking hours and the larger share of my thoughts; and the effort to equip the projectile properly, to admit no surplus weight, and yet to overlook nothing essential, was one that called for all the ingenuity I possessed.

First of all, it was necessary to procure adequate supplies of food, food that should be condensed in form and yet healthfully varied; secondly, it was important to provide the projectile with efficient and well tested parachutes; next, it was indispensable to install radio apparatus, oxygen tubes and tanks, air-proof water containers, and an electric heating system to combat the cold of space; and, finally, we must secure miscellaneous paraphernalia making for convenience and safety: astronomical charts and chronometers, field glasses and hand telescopes of assorted sizes and powers; a spectroscope, a thermometer, a telescopic camera and various scientific instruments; pens and pencils and tablets of paper for recording the details of the journey and making computations; smoked lenses for combating the persistent glare of the sunlight; books for whiling away the long leisure hours; chairs and a table and a folding couch for purposes of comfort; screws, nails, ropes, straps and wires for holding the furniture in place when released from the earth's gravitational influence; blankets and fur coats and other clothing for resisting a low temperature, as well as asbestos garments in case of a dangerous heat; rubber gloves and jackets, and an artificial cooling plant for the initial stages of the journey; a well stocked chest of tools for repairing any possible damage to the projectile or the parachutes; various fire-extinguishing chemicals as well as complete equipment for the production of artificial air; and last, and in some respects, most important of all, a medicine chest provided not only with drugs, antiseptics and surgical implements for every conceivable contingency, but with a painless anæsthetic to be administered if the shores of Venus remained permanently inaccessible and it was thought best to hasten the inevitable.

It must not be imagined, however, that the burden of the preparations fell exclusively upon my own shoulders. Certainly, I contributed no more in time or efforts than did my prospective traveling companion, the young astronomer, Nu Olan. If anything, Olan's zeal to depart was greater than my own, for while I had no more than a general interest in the planet Venus, he had made a special study of that globe, and was anxious to verify several of his pet theories and observations. Neither of us, unfortunately, could foresee the event that was to frustrate all he had attempted and to make his best-laid plans a source of regret and vain dismay.

Before I describe that event, I must apparently diverge, and mention a friend of Olan's, one Daolgi Kar, an aspiring young poet whose self-recognized talents had as yet attracted no attention in the world at large. Not being a poet myself, I cannot pass judgment on Kar's ability: all that I know is that he would appear frequently at Olan's rooms and recite his own verses with that dearth of histrionic skill, which authors seem usually to display, when reading from their own work. For some reason which I could not then explain, Olan appeared fond of the poet and even proud of him, and would pat him companionably on the back and assure him that he was a "coming man"; and the only disagreements Olan and I ever had were occasioned by Kar's interruptions of our astronomical discussions. It would not have been so bad, if Kar had confined those interruptions to the subject of poetry; but, with more good will than ability, he insisted on aiding in our plans for

Far, far beneath us, vividly seen through one of the thick glass plates in the floor, was the world we were leaving, the whole great world, spread out in a vast rounded disk almost from infinity to infinity . . .

the contemplated flight, and as a general rule would aid us only to blunder. Even this, however, might have been pardonable had not Kar manifested a desire to take a superlunar cruise on his own behalf. Repeatedly he would bewail the stupidity of the Commission in not having chosen three men for the adventure; and time after time he would entreat me to smuggle him somehow into the projectile. Of course, we would but smile at his persistency; but he did not readily abandon the idea, and in the end was to succeed better than either of us had anticipated.

To this moment I can recall Daolgi Kar with a vividness born of harsh experience. Somehow, he comes back to me as he was wont to appear in Olan's rooms, and not as the weatherbeaten, chastened adventurer of later days—a tall, ungainly stalk of a man, with long, thin limbs, and a long, thin head, and a high, narrow brow surmounting a pair of mellow bespectacled dark brown eyes. His ample, flowing hair was a pool of black waves and ripples; his loosely hung robes displayed a medley of bright green and golden and purple fringes and adornments; the gnarled and twisted walking stick he carried was surmounted by a huge crystal ball useful for offensive purposes; and the dog that trotted everywhere at his side—a creature at first no less detestable to me than his master—was an agile, furry little beast that answered appropriately to the name of Yap Yap.

AS the day of the adventure drew near, young Kar made himself particularly obnoxious; his already too-frequent visits became still more frequent, and he insisted with more gusto than ever upon being allowed to accompany us. If only to escape his constant pleadings, I felt that I should welcome the moment of my release from earth; and such was my irritation that I congratulated myself upon never having to meet him again this side of eternity. I am not certain but that I told him as much, while he listened in incredulous amazement; but that he was not one to take angry words seriously was made evident to me some time later—to be precise, during my last hour on earth.

With incredible speed that hour was drawing near. When the time was two weeks off, I could scarcely believe that I had all but passed off the human scene; when but one week remained, I still felt that eternity stretched between me and Venus. But steadily the hours continued to flow past, and when but five days were left, I somewhat sadly stepped into the little airplane that had served me for the last eight years, and crossed the ocean for a final melancholy visit to my two closest friends. I well remember the farewell they bade me; it was the farewell one delivers to a doomed man; and though we were all of mature years, and all of us had believed ourselves above mere sentimentality, there was not one of us that was dry-eyed, when, mounting my biplane and waving adieu with forced cheerfulness, I started the motor and lunged cloudward on my way to Mount Skytop.

This mountain, the highest of that range which dominates the South American continent, had been selected for the experiment partly because of its altitude of twenty-two or twenty-three thousand feet, and partly because an expanse of table land, a few hundred yards below the peak, afforded an ideal landing place for airplanes as well as an excellent starting point for the projectile. But the deciding factor was that it was located near the equator, so that Venus might be almost at the zenith at the moment of departure, and the atmospheric resistance accordingly be reduced to a minimum.

As I had only a few hundred miles to cover, my flight to Skytop was swift and uneventful. Upon alighting, I found everything exactly as I had anticipated: a shaft about fifty feet deep and twelve feet in diameter had been sunken into the ice and rock; and at its base reposed the interplanetary car. A growing feeling of light-headedness, of giddiness, both due to the high altitude, prevented me from glancing more than casually at the snow-clad ranges that rolled endlessly beneath; but before I had had time for more than a glimpse at my surroundings, half a dozen men sprang forth almost simultaneously from a small door in the ground, and, after welcoming me heartily, bade me follow them down the sharp descents of a rock-bound tunnel.

A moment later I stood in a little electrically lighted and heated compartment, in company with a number of officials and representatives of the Interplanetary Commission. Having received their greetings and congratulations, I sloughed off my great fur coat and sank into a chair, dazed by the altitude and incapable of coherent thought. A hasty application of oxygen revived me, but it must have been an hour before my brain had cleared and I felt once more something like my normal self.

I was just beginning to recover when I observed two or three of the officials whispering furtively among themselves in a corner of the room. As though by telepathy, it flashed upon me that there might be some break in our well considered plans; nor was it long before my suspicions were verified. As soon as I again appeared capable of sustained discussion, one of the men approached me and confided that fears were held for the safety of my intended traveling companion, Nu Olan.

"But when did you last hear from Olan?" I exclaimed, in dismay and dread.

"Only this morning," answered a member of the Commission, nodding gloomily. 'At sunrise he sent in a cheerful message, reporting that he was about to leave by airplane for Mount Skytop and might be expected within an hour."

I glanced at the clock on the wall, and made a rapid mental calculation. More than four hours had elapsed, and a quarter of that time should have sufficed for covering the three hundred miles from Olan's starting-place. Yet no sign of the prospective adventurer had been seen, nor had the Commission's persistent radio inquiries brought any response.

As yet, of course, there was the possibility that he had merely been delayed by some minor mishap, and would still arrive uninjured. But if he were to be in time, he must appear within an hour. Already the sun was high in the heavens; and the projectile must be launched shortly before noon or not at all. This meant that the travelers must both be present before eleven o'clock, so as to allow them time to adapt themselves to the altitude as well as to make a few necessary preparations. But if, as now seemed likely, the projectile failed to leave this morning, it would be too late to take advantage of the nicely timed calculations of astronomers and of the earth's approaching conjunction with Venus, and we should have to wait the better part of two years for the next opportunity.

For a long, weary hour we watchers on the mountain-top awaited the absent one's arrival. Far above our close but comfortable little dugout, high on the wind-harried, frozen dome of Skytop, a fur-clad watcher with field glasses ceaselessly scanned the horizon for sight of the soaring dot that would bring the long awaited, welcome news. All in vain!—the minutes went by, whole eons went by, but no moving thing disturbed the icy desolation. Then suddenly, when we had all but given up hope, when we were assuring ourselves that Olan was lost among the awful peaks and wintry canyons, the observer came dashing by leaps and bounds down the mountain and down the dark stairway, and, bursting excitedly into the room, blurted out the tidings, "I see him coming! I see him! I see him!"

Seizing our fur coats with athletic speed, all of us went dashing up the stairs and into the fearful, outer

cold. Yes, there it was, surely enough, a dim gray curving speck in the far distance, but rapidly drawing nearer, rapidly drawing nearer—Nu Olan, beyond a doubt! Onward, onward, the flying point darted at tremendous speed, each fifteen seconds bearing it a mile nearer through the clear air. Now it came vaulting across the opposite range, and high over a deep snowy canyon; now we could hear the purring of the engine as it went wheeling above our heads like a great bird in uncertain flight; now it began gracefully to descend, moving in a series of long-drawn loops and spirals; now it came swinging near to earth, and we all ran forth anxiously to greet Nu Olan as the brakes ground and clattered and the machine went jerking and thumping to a standstill.

"Nu Olan! Nu Olan!" we cried, like children in our eagerness, and then suddenly stopped short, for out of the machine staggered an ungainly, long-legged figure—not the astronomer, but the poet Daolgi Kar!

AFTER we had helped Kar into the dugout and allowed time for his recovery from the effects of the altitude and the cold, we listened breathlessly to his story. There was not much to tell—it was not so bad as we had feared, and yet was bad enough. Olan had set out that morning at the appointed time, Kar accompanying him in his own plane, and intending (so he assured us) to see him only so far as the base of the mountains. But before they had covered fifty miles, and while making a low flight across a wide plain, Olan's machine developed engine trouble—developed engine trouble so swiftly, that he had no time to use a parachute and Kay had no chance to aid him. Indeed, the first warning the poet had was when he heard the crash; and, turning back in horror, he fully expected to find the astronomer dead beneath the débris of his plane. But, through some freak of fortune, Nu Olan was still alive, although in agony; and, upon examination, the poet had concluded that he was suffering from internal injuries as well as from many minor cuts and bruises. As there was little he personally could do, Kar hastened away for aid, and returned a few minutes later with a physician who confirmed the diagnosis by declaring that Olan had two broken legs. Together they removed the unfortunate man to a hospital a few miles away, where it was stated that his recovery would be a matter of months.

Acting upon Olan's request, Kar had undertaken to notify the Interplanetary Commission of the accident; and feeling (so he said) that a direct communication would be more appropriate than a radio message, he had set out in his airplane for the summit of Skytop. He had left in good time, and would have arrived at least two hours sooner had he not inadvertently neglected to provide himself with a compass; but, owing to this lack, he had lost his way among the mountains, and might still have been exploring the air in aimless circles had he not by chance sighted and recognized the dominating peak of Skytop.

It was not until after finishing his recital that Daolgi Kar perpetrated his real surprise. Then, springing suddenly to his feet and uttering an embarrassed exclamation, he seized his fur coat and plunged excitedly into the outer world, to return a minute later weighted down—with three large suitcases!

"What are those for?" we all inquired, astonished.

"Why, for the trip," he explained, as soon as he had recovered his breath. "My baggage for the trip."

"Your baggage for the trip?" we echoed.

"Of course. Nu Olan can't go, so why shouldn't I? He said he was willing, if you were."

"But this is most irregular," I protested. "No one can go without being officially selected by the Commission."

"True, but in case of emergency, the Commission has the right to appoint substitutes. Isn't that so?" pleaded the poet, turning to the bewildered officials.

"Yes, that is so," they admitted, gravely.

"But certainly you're not ready to go on a flight like this!" I argued. "It's not possible!"

"All things are possible," he dogmatized, with a suave smile. "To tell the truth, I had a premonition I might be needed, so I had all my things nicely packed and loaded on my airplane when I set out with Nu Olan this morning."

For reply, I could only gape blankly. The presumption of the fellow passed all limits. To be sure, I was anxious to embark upon the adventure—but it seemed to me that any delay would be preferable to a journey with such a companion.

"Are you perfectly certain, Mr. Kar, that you wish to take part in the expedition? Are you fully aware of the hardships and perils involved?" It was the voice of the Head Member of the Commission; and my heart sank a thousand degrees as I heard Kar signify his willingness to undergo any perils whatever, and as I listened to the members of the Commission commending him—actually commending him!—for his self-sacrificing spirit and his bravery.

"Well, time is flying!" observed the Head Member, snapping out his watch, and reminding us that it was already past eleven o'clock. "If we rush, we'll still barely have a chance to get off on schedule. Are you willing, Mr. Reve?"

And without taking time to hear my mumbled answer to his rhetorical question, the Head Member turned to the poet, and directed, "Hurry up! This way! We've not a second to lose!"

Disconsolately I followed them into the open door of the projectile—and the supreme adventure had begun.

CHAPTER III

Face to Face with the Unknown

THE first moments of that world-to-world flight are obscured for me by a haze beneath which I shall never be able to penetrate. At the sudden, long-awaited blast of interatomic energy which sent us careening skyward at a speed of seven miles a second, it was as if by one swift stroke I had been cudgelled into unconsciousness; and the chronometers reported that it was many minutes before I had emerged into a dazed awareness of myself and of my surroundings, and began to realize that my head felt giddy and strangely light, and that my feet, which had been shackled to the floor so as to forestall a fatal accident, were aching as though trodden upon by elephants.

It was with a brain only gradually clearing that I unbound myself and began to take account of my surroundings. In company with my friend, the poet, who still seemed more than three-quarters stupefied by the shock, I occupied a compartment with circular floor perhaps ten feet in diameter and vaulted ceiling possibly fifteen feet in height, which meant that, making allowance for the provisions strapped against the walls beneath the minute round windows, my companion and I had about as much spare room as though chained in one of those dungeons of which ancient historians speak.

But the spectacle which presented itself to our gaze certainly was not dungeon-like! Far, far beneath us, vividly seen through one of the thick glass plates in the floor, was the world we were leaving, the whole great world, spread out in a vast rounded disk almost from infinity to infinity, its northern and southern zones mantled with wide sheets of glittering white, which toward

the equator gave way to strips of white and brown interspersed with patches of green, while little icy ridges offset by tiny black shadows denoted the tropical mountain ranges. Surrounding those stretches of black and white and green and brown were vaster areas of a gleaming silver hue, where the sunlight fell brightly on the ocean waves; but in places the light was walled out by ragged, opaque formations, or reflected by snowy screens, which I recognized as clouds; and far to the right, bordering half the world with a thin dark band, was the undistinguishable territory, where still the gods of night held sway. So rapidly were we traveling that the aspect of the landscape changed even as I watched, and the earth seemed to dwindle and recede; and it was with a sensation of unutterable desolation that I saw my home and the home of all mankind waning and retreating beneath me, while I went speeding irretrievably toward the unknown, alien dominions of the stars.

But my sensations during the first hour or two were so varied and curious that I had little time either for observation or for melancholy reflection. As I began to recover from my original daze, I became conscious of a terrific, burning heat, a heat which even our artificial cooling system was unable to dissipate, the heat engendered by the projectile's meteoric friction with the atmosphere of the earth. Had not the walls about us been composed of a specially prepared heat-resisting alloy, both the poet and I would have been baked to cinders during the first half minute of our flight; as it was, we were somewhat blistered about the face and hands, but escaped serious injury.

It was not long, however, before we discovered that excessive heat was not to constitute one of the problems of our journey. Soon after we had escaped from the protecting blanket of the atmosphere, the cold of space began to seep in even through the thick metallic rind that enclosed us; and within an hour we found that it was all we could do to keep warm even with the aid of fur coats and electric heaters. And at the same time we discovered, to our dismay, that the artificial air pressure was insufficient, despite all the precautions Olan and I had taken; and both Kar and I paid the penalty not only by an insistent dizziness, but by repeated nose-bleeds, which continued throughout the journey.

Almost simultaneously we noticed a phenomenon which I had foreseen and which was to grow more pronounced in the course of the next few days, yet which, when first experienced, filled me with a sensation unlike anything I had ever known or imagined. Now that our distance from the earth had released us from much of its gravitational influence, our bodies took on an unwonted lightness, I might almost say airiness, so that our limbs could work with several times their usual agility and speed and yet scarcely feel the effects of the strain. Once, merely by way of experiment, I leapt with but little effort from the floor, and was amazed to find myself colliding with the ceiling; nor was I less astounded to return to my starting point with a slow and graceful movement, almost like a feather in the wind, so that I regained my feet as easily and as pleasantly as though alighting on cushions.

BUT, great as were the surprises afforded by the little freaks and twists of nature, they were no stranger than those occasioned by my fellow traveler. From first to last, Daolgi Kar was a problem and an unfailing source of astonishment. I am confident that nowhere else in the universe could I have found a companion so thoroughly eccentric. I thought I had known Kar, and known him at his worst—but I was to learn that which the boldest imagination could never have pictured.

The first blow came immediately after Kar's recovery from the shock of the departure. Then it was that, after casting a few remarks about our good fortune in starting on time, he remembered to open his suitcases, and displayed the most incredible baggage that ever went on an interplanetary cruise. In the first and largest of the grips, quietly sleeping on some straw as though still in his native kennel, was a creature whom I recognized with horror—that abominable dog, Yap Yap! On being awakened, little Yap crawled out somewhat sheepishly, while I stood by glaring thunders and lightnings that Kar did not seem to notice. Then, having allowed himself to be stroked back to intelligence by his master, the ungracious beast showed me his teeth and started a pandemonium signifying as clearly as words could have said it, that I was an unwelcome stranger; after which, having been quieted by his commander-in-chief, he peered disconsolately about the room and through the little glass plates in the floor, as if he could not quite make up his mind where he was or what our strange adventure was all about.

"Poor dog! He was all alone and homeless!" Daolgi explained, appearing to realize for the first time that I might not look upon Yap Yap's presence with approval. "How could I desert him, uncared for, dependent on the mercies of an unfeeling world?"

Here he fondled the still-bewildered Yap Yap, as if to supply visible proof of his affection; and Yap Yap responded demonstratively with wagging tail and moist, caressing tongue.

Since Kar seemed so well pleased, what was there that I could do? I was outnumbered, outnumbered two to one; and I did not pause to remind Kar that our oxygen reserves were limited, and that the presence of another breathing creature might entail grave consequences. I did not venture to point out that our food supplies were no more than ample, and that we had not laid in a store of dog biscuits; I did not presume to remark how inimical to sanitation the presence of an animal might be, nor to express my disgust at the prospect of an incessant howling and snarling. I merely turned away, biting my lip in anger, and inwardly berating whatever gods there be, for sending me on a thirty-million-mile journey in company with a madman.

It was several hours before, chastened by the reflection that Kar was the only companion I could expect to have for the immediate future, if not for the rest of my life, I took steps toward healing the breach between us, and began by asking him just why he sought to embark on this perilous adventure.

"Oh, there were many reasons," he explained, with a most serious air, and yet, I imagined, with just the trace of a sly twinkle in his eye. "Why, to begin with, look at the marvelous poetic material to be found on a flight like this."

"But what's the use of poetic material," I returned, "unless there's some one to appreciate what you write?"

"That's just the point," he insisted, still with the same enigmatic twinkling expression. "No one on earth—no one, that is, except Nu Olan, and my mother, who is dead—has ever appreciated me. I want to go to a world where a man of my type has some chance of recognition!"

This was too much for me. I could not believe that the poet was quite serious—yet I could not refrain from reminding him that the people of another world (assuming that such people existed) certainly would not speak our language, and assuredly wouldn't be rapturous about our sort of poetry.

"Well, neither do the people of our own world seem to be rapturous about our sort of poetry!" he flung back. "At least, not about my sort! We'll have to educate them, that's all!"

It may seem incredible, but during the days that followed, I actually came to tolerate Kar. Had it not been for certain peculiarities of temperament, I might even have learned to like him. He continued strangely

cheerful and good-natured, no matter how testy and gruff I became; and after one penetrated beneath the cloak of his egotism, one found his personality attractive enough. It was annoying, however, exceedingly annoying, to be interrupted in the midst of some delicate scientific calculations, and to have Kar flamboyantly read me a sonnet in order to determine whether I preferred the word "those" in the eleventh line to the word "these," or whether I did not consider that a dash would be more effective than a colon to denote the cæsura in the second but last line of the octave. Except for such little irritations, to which I would reply by putting to Kar some technical problem concerning the eclipse of one of Jupiter's satellites or the parallax of the star Alpha Centauri, the two of us managed to agree somewhat better than I had expected; and, if not exactly companionable, we at least got along as well as any two cell-mates, who realize that they must share the same accommodations—perhaps for eternity.

Fortunately, we were so much occupied with observing the phenomena of our flight, that we had comparatively little time to devote to one another. Ever since our departure, of course, we had been flying in perpetual daylight, and only the shifting hands of the chronometer gave indication of the passage of hours or days; though down beneath us, far, far beneath, the face of the earth in its ever-changing phases offered constant cause for reflection and wonder. When we had been twenty-four hours on our way, it seemed scarcely larger than the full-moon as viewed by man, a pale yellow full-moon lost in a vague immensity of sunlit gray; and that gray was broken by an uncanny black patch, the shadow of the projectile, where the stars were strangely visible. When our flight had endured for forty-eight hours, the earth was no more than a little yellow ball, a glittering coign of light, staring through an unfathomable abyss whole universes below us; yet now, as we went hurtling sunward, the solar disk of sun-tinged yellow appeared no larger than ever to the eager eyes that strained toward it through the smoked glasses. It was singular that, while more than a million miles separated us from the earth and while that distance was widening several miles each second, yet we seemed suspended in space, suspended and utterly without motion; and it was only our intellects that told of our prodigious speed, while our senses refused to record and our imaginations refused to appreciate a velocity, which was many times greater than that of sound.

TRAINED as I was to scientific methods and figures, I had difficulty in realizing that, though we were traveling fast enough to circumnavigate the earth in an hour, yet it would be well over a month before the widening disk of Venus would brighten out of obscurity. Never before had the tremendous range and sweep of space been borne in upon me; never had I understood how true it is that man and his works and habitations are but a speck in illimitable vacancy. Yet we were now, as it were, merely in our own little inglenook of the universe, merely in our own small fireside cranny; and, even as we sped sunward, observers on the earth were listening to the messages we sent and flashing back messages which we received, while skilled operators sat at radio-electrical batteries, directing our flight by means of the invisible antennae of the ether, retarding our course or hastening it, as they saw fit, and guiding us with unerring precision toward our far-off goal.

Our sense of the awful immensities wherein we were lost was accentuated when, after three or four days, the earth's disk vanished altogether, and our native world sank to the status of an exceedingly bright planet. How hard it was now, peering toward this spark of light, to be convinced of the greatness of the earth and of what earth contained! As I gazed for the first time with detached vision at the world of my birth, it seemed to me that I had never really seen it before: I was as an ant miraculously endowed with an eagle's wings and eyesight and able to gaze down from the clouds at the microscopic nest it had regarded as the universe.

But while the earth was receding toward the limits of the visible, Venus was still as far out of sight as ever. Lost somewhere amid the increasing blaze of solar radiance, it was not an object even for telescopic observation. Most of our interest was now focused upon the sun, which, after a few days, loomed perceptibly brighter and larger, as if, shaking off millions of years with one bold swift gesture, it had regained its youthful magnificence and power. And as the sun drew nearer, our center of gravity gradually readjusted itself, and our projectile shifted so that its base (the heaviest part) directly confronted the sun. Whatever weight now remained to us was due to the sun's attraction, and was counteracted in part by that of the earth: which meant that our movements were even freer than theretofore; that I could rise to the ceiling as easily as an average man can walk across the room, and descend as slowly as though my medium had been water. The sun now seemed directly below us, instead of above, as before; and down, down we sped, straight down toward the solar flames; down, down, down, so accurately that I had fears lest some miscalculation, some failure of the electrical waves from the earth, should send us falling into the shrivelling flames.

But despite occasional forebodings, the first part of the journey was uneventful. There was nothing to interfere with the peaceful monotony of our flight; we proceeded on our way with the serenity of a planet moving along its orbit. Not until our journey was three-quarters done, and the oxygen generators seemed inadequate to renew the vitiated air, did there appear to be actual cause for misgivings; and even then we were no worse off than many a man who deliberately confines himself in a shuttered apartment. Although a maddening desire for free winds and open spaces possessed me, and although I felt half like a victim of suffocation in my frenzy to thrust off the strong hands that wound themselves invisibly about my throat, still I realized that there was as yet no real danger, and that a single whiff of the fresh breezes would revive my starving lungs and half-beclouded brain.

Even the once-cheerful Daolgi Kar appeared to feel the scarcity of oxygen, and began to mope miserably, displaying none of his former vivacity and not deigning to put pen to another verse. And Daolgi's dog, the normally energetic Yap Yap—to whom, strangely enough, I was beginning to be attached, now that he had accepted me as a member of the family—seemed stricken as if with some nameless malady, and spent most of his time sleeping or resting near the wall in immediate proximity to the electric heater. From Yap Yap's actions—in those rare moments when he still exerted himself to walk about—it was apparent that here was a dog who thought that either he or the world had gone crazy. There would be an expression actually of terror on his hairy countenance when, leaping in play toward his master, he would find himself ascending to the ceiling; and so uncertain and so absurd had his movements become that he apparently reposed no further trust in his feet.

Unwittingly, Yap Yap could not but affect his master and myself. In his anxious, inquiring brown eyes, as he lay huddled in a little heap on the floor, we would read the fear of the hunted creature, the creature that scents mysterious danger, the trapped creature that trembles lest at any moment his antagonist strike from the dark. And, try as we might, argue as we would that it was all a meaningless superstition, something of the impotent dread written in the animal's eyes com-

And now suddenly we were launched into vacancy, sinking below the projectile, yet also traveling at equal speed with it horizontally.

municated itself to us. Almost hourly, as the void sundering us from the earth grew deeper, as the sun waxed nearer and brighter and the world of our destination drew closer and closer, we felt that unspeakable, inexplicable terror creeping heavily and icily upon us. All that we did to combat it seemed only to intensify it; it was as though instinct were warning us while reason stood by powerless and aghast.

IT was only when Venus began to emerge visibly, a dim planet far to our left, half blotted out by the intense sunlight, that our forebodings crystallized into a lingering and inextinguishable dread. Now it was that we recalled the previous expeditions, the seven expeditions that had begun auspiciously and ended in tragic silence; we remembered how, for a while, the adventurers invariably had flashed back reassuring reports, until a sudden veil had fallen, a veil that had never lifted; we noted with awe that we ourselves were soon to enter that precarious zone, from which our fellows had sent their final messages. And thinking how their lives had perhaps been snuffed out candle-like by the Unknown, and recollecting the fourteen melancholy wreaths that decked the Cenotaph of Lost Explorers, we could not but wonder how many wreaths there would be after another year.

Nor did the passing days serve to dissipate our profound, unaccountable sense of peril. When our journey was in its last lap and our course had mysteriously shifted, and directly beneath us shone not the sun but the widening disk of Venus, three-quarters girl in the silver-fringed blackness of night, our feeling of danger was sharpened until it became an obsession. Could we then have reversed our course, and gone speeding back through the unthinkable void to the earth, neither Kar nor I would have hesitated. It was not that we were cowards, for we certainly did not tremble in the face of any known hazard; it was that this particular hazard was unknown; that we were chained, gagged and blinded, and were incapable of lifting a finger to save ourselves.

As we approached the surface of Venus, we observed that it was peculiarly overcast, peculiarly clouded; that the mists which had baffled astronomers from time immemorial were not dissipated even at the comparatively insignificant distance of eight or nine hundred thousand miles. From time to time, indeed, our telescopes did show us actual glimpses of the world—flashes of green and white and blue and brown—but these were so rare and fleeting as to preclude accurate observation. And when our distance was lessened to well under half a million miles and Venus stared below us as a partly dark, partly luminous globe several times the apparent size of our own moon, it still was wrapped in a light-reflecting screen that almost completely obscured it, reminding me of a woman who conceals her features beneath a silver veil.

From hour to hour the shifts in the screen grew more frequent and wider, yet on the whole the mantle remained strangely constant; and I found it increasingly hard to believe that this was no more than a film of vapor such as may overhang the earth. Rather, it appeared to be a phenomenon not paralleled by anything on our own world. And, gradually, perhaps because that phenomenon was unknown or because there was something subtly menacing about it, the suspicion grew upon me that here was the real peril, here was something disastrous and inimical to life, here was the mysterious terror that had silenced the voices of all who had gone before us.

Yet, as though that strange glittering screen were no more than a mirage, the danger apparently receded, when the cause for fearing it should have grown more acute. All-enveloping and impenetrable as it seemed at a height of hundreds of thousands of miles, it receded unexpectedly when the distance became but a few thousands; and toward the end of our flight only the faintest shimmer gave evidence of its existence. The actual surface of Venus now spread broadly beneath us, multicolored like that of the earth, silvery bright where rolled the wide ocean, gray and brown and reddish green where spread the vast expanses of the land, brilliantly white where reached the northern and southern polar caps (polar caps so much smaller than those of earth!), bleak gray and cotton-like where the great clouds drifted fantastically, and intensely black, where the night had laid its shadowy hands. After all, I thought, the contours of Venus were not very different from those of earth!—after all, it was our twin planet, and life there should not be impossibly hard!

But again I was reckoning without the facts. For one moment I had forgotten that strange luminous veil; for one moment I had forgotten the fate of my predecessors. Soon I was to leap to my feet in dismay and quick alarm, finding all my apprehensions justified, my worst forebodings realized, my persistent sense of peril vindicated, in a manner more violent and sudden and terrible than I could once have believed possible.

It was on the forty-third day of our flight that matters came to a climax. I am sure it was the forty-third day and not the forty-second, for not only did radio messages confirm that fact, but the hands of the chronometer, of which we kept accurate record, had just completed their eighty-fifth twelve-hour circuit. Then it was that, on a slowly shifting course, we swung around so as to travel parallel to the surface of the planet. An abyss of three or four hundred miles still intervened between us and our goal; and, in order to cover the distance, we had to abandon the projectile and entrust ourselves to the parachutes. This would have been impossible in view of the tremendous gulf beneath, had not the parachutes been equipped with electric wings which would guide us once we struck the upper reaches of the atmosphere; and, even so, we could not have expected to survive without the oxygen tubes and the films of compressed air, which would surround our bodies, ward off the cold of space, and supply us with that atmospheric pressure requisite to life. At the moment of departure, an electric motor would give the parachute a vigorous downward thrust, lest it accompany the projectile as a satellite of Venus; and our horizontal speed of several miles a second would save us from a direct fall and allow us time to readjust both our velocity and our position.

SO much for our plans. As everything had been arranged with precision and forethought, there was no obvious need of departing hastily from the projectile. Yet, when at last the moment arrived when we could set forth, I felt an almost frantic desire to be free—to strike out without delay for the solid ground. Daolgi Kar, on the contrary, seemed almost reluctant about leaving; he spent many minutes preparing a compressed air container for Yap Yap, while I stood by in fuming impatience; next he pleaded that he had forgotten something important, he could not recall what, and stood gazing vacantly at the almost indistinguishable fields and mountains that swept by far below. By this time I was so angry that I could literally have taken the poet by the neck and forced him to hurry—yet all of a sudden my anger was quenched in a stronger emotion.

Just ahead of us a strange gray shadow went flashing by with incredible speed, like the lightning flicker of gigantic and ill-omened wings!

And while Daolgi and I stood gazing at one another in consternation, another shadow shot past to our rear, seeming as the sudden dim reflection of something unearthly and evil.

Now, by a swift mutual impulse, Kar and I both

seized small hand telescopes, and dashed to the tiny glass apertures that served as windows. It did not take us long to solve the mystery—far in the distance, traveling at right angles to us at prodigious speed, we could distinguish multitudes of sun-reflecting meteoric dots, mere dust-specks darting in great clusters almost parallel to the surface of the planet.

This, then, was the explanation of that mysterious cloudy screen we had noted from far above! This, then, was the reason for the disappearance of all our fellow explorers! The planet Venus was encircled by swarms of meteors, so dense that from the heavens they seemed a solid mass, and revolving in orbits that crossed our own possibly in a thousand places!

All at once, as we made that discovery, we realized our peril. We were in the path of multitudes of projectiles, many of them plunging in our direction at a speed of miles a second! At any moment one of these blind missiles might strike us, strike us and annihilate us so swiftly that we should never learn what had happened! . . .

Let me pass over the insane hurry of the next few minutes. I have only the most blurred remembrance of my own frantic movements. But, by some freak of recollection, I recall Daolgi's frenzied efforts to leave: how he adjusted his parachute with such speed that he ripped open half a foot of rubber lining, and had to waste precious minutes in repairs; how he reached madly for all sorts of odds and ends, smoked glasses, scraps of food, his poetic manuscripts, and a thousand and one incidentals; how he fumbled endlessly to strap Yap Yap's compressed air container tightly about the parachute, while in my apprehension I cried that the dog would be the death of us both. . . . I remember, too, how just at that moment a great shadow—not gray this time, but black—passed between us and the sun, urging speed more forcefully than any words of mine.

But at last our equipment was completed. At last I pulled open the trap-door in the floor and simultaneously started the motors which were to thrust us downward into space. And now, suddenly, we were launched into vacancy, sinking below the projectile, yet also traveling at equal speed with it horizontally. We had barely had time to observe our position, barely time to adjust ourselves to our altered surroundings, when that event occurred which is still seared deep into my memory, and which no passage of time and no experience shall ever wholly erase. There was a sudden and intense flare of light from above, an incandescence so brilliant that I had to close my eyes lest I be blinded; there was a shrivelling heat, and the impulse of a torrential wind bearing me downward in a silence more terrifying than thunder. And when the glare borne in to me through my closed lids had diminished and I ventured again to peer upward, there was not a sign of the projectile, but far above and far to one side a redly glowing mass that smoldered into ashes and disappeared.

CHAPTER IV

Triumph and Defeat

IT will be imagined that our arrival on Venus was the occasion of wild triumph and never-to-be-forgotten elation; that, upon completing the first world-to-world flight ever recorded, we uttered prayers of thanksgiving and pæons of joy. In reality, however, nothing could be further from the facts. Not so much as a murmur of rejoicing issued from my lips—nor from the lips of that natural songster, Daolgi Kar. For my own part, I was too enervated, shocked and stupefied to feel anything but a vague weariness and a vaguer relief; I was as one who, convalescing from some deadly disease, is content to lie languidly and not to move and scarcely to think. Only at broken intervals, half lucid like the memories of a hideous dream, the facts of that nightmare plunge in the parachute would thrust themselves before me—the swift drive outward and downward after the annihilation of the projectile; the roasting, blistering heat from our first sudden friction with the air; the rapid application of the electric motors to check our speed and counteract the atmospheric resistance; the bird-like flight slowly downward through unspeakable distances; the vain attempt to accelerate our motion and so to anticipate the fall of night; the last fearful circling descent through a starlit void; and the sudden jolting arrival in a shadowy realm whose nature we could only vaguely conjecture.

At the actual moment of landing I had lost track of Daolgi. Exhausted, and with head that ached from the long ordeal of the oxygen tubes, I released myself from the parachute, and sank down upon a bed of stringy vegetation, with the strangest sensation I have ever experienced. There must be something peculiar about the atmosphere of Venus, some quality distinguishing it from the atmosphere of earth, for I gasped like one who visits a laboratory where rare gases are brewed, and my nostrils were full of a strange chemical odor, not exactly unpleasant, and yet not quite like anything I had ever known before. Perhaps this odor was connected with the sudden dizziness I felt, or perhaps it was only the sudden change of environment that made me recline half dazed upon the ground, like one who has inhaled a whiff of some mild anæsthetic. At all events, it was hours, how many I cannot say, before my lassitude had left me and I began to feel remotely like myself.

I think I must have passed into a slumber—a deep, sodden slumber as of one drugged—for when finally I opened my eyes, I discovered a preternaturally large sun shining almost directly above. But I was feeling much better now; my lungs were already adapting themselves to their new environment; the unexplained chemical odor had become less noticeable, and the air, although uncomfortably warm, seemed invigorating and life-giving.

Somewhat shakily I arose, and shading my eyes with my hands, obtained my first clear glimpse of my surroundings. And, in sheer admiration of what I saw, I cried out in delight—here was a scene unlike any I had ever viewed before! It seemed that I was in a sort of clearing or glade in a forest—and what a forest, and what a glade! Encircling me at a distance of several hundred yards were dense masses of trees, gigantic trees with tall red trunks and impenetrable clusters of greenish-red foliage. From the topmost branches swung bell-shaped blossoms of delicate azure and white, blossoms particularly lovely against the pale shimmering violet sky; yet they were scarcely more beautiful than those other flowers that sprinkled the field around me—innumerable constellations of green and yellow, clustered on densely growing vines with leaves of the color of milk. Had it not been for the intense glare of the sunlight, which forbade me to gaze too long, I could hardly have taken my eyes off this scene, at once so charming, so fantastic, and so different from all I had ever known before!

It was only when turning my gaze from this spectacle that I recalled something of imminent importance. Now for the first time I remembered that, since the moment of my arrival, I had seen nothing of Daolgi Kar.

Where was he?—what reason for his silence? Had he met with some mishap? Had he been unable to make a safe descent? Assuredly not! During the parachute flight, his course had closely paralleled my own—he could not be far away! Yet the very thought of a possible accident sent a sharp, shuddering tremor shivering through me. Much as I had disliked Kar on earth and little as I had welcomed his presence in

the projectile, I found him strangely dear to me, now that he was my only fellow creature in an unknown world.

Leaving the parachute where it had alighted, I set out to look for Daolgi. I chose my course at random, and with difficulty dug a path through the fibrous, clinging vines. Having reached the rim of the forest, I began slowly to encircle the glade, shouting the name of Daolgi and feeling a sudden desolate sadness when my first efforts met with failure, and the deep, dark forest echoed and re-echoed my words in vain. I had gone halfway round the glade, and had more than half given up hope, when an excited answering hail sent a wave of joy vibrating through me, and almost caused my heart to miss a beat.

It was the voice of Daolgi, beyond question the voice of Daolgi!—But why so agitated? And whence did it issue?—from what dark recess of these inscrutable woods?

Again I called; again the tremulous reply, in tones of entreaty and fear. Eagerly I peered all about me, across the glade and into the thick multitudes of the trees, and an almost uncanny feeling possessed me, for of Daolgi there was still no sign.

"Up here! Up here! Up here!" came the voice, pitiful, shrill, importunate. And up I glanced. But I might have been a blind man—I saw nothing.

"Up here! Up here! Up here!" rang the repeated appeal, in a distressing monotone. And still I searched with my eyes the dark masses of foliage, then stopped short with a start—in one vivid flash the mystery had been solved!

Dangling from among the treetops was a gray shapeless mass—the disabled wing of a parachute!

"Up here! Up here! Up here!" came the voice once more; and up I started without delay.

Fortunately, I had always been a fairly good climber; besides, there were dozens of knots and small limbs to offer me a foothold; so that, before many minutes, I had ascended precariously to Daolgi's rescue. I found the poet fastened tightly to his parachute, incapable of releasing himself; but, once having reached him, I had little difficulty in setting him free. I was relieved to find him uninjured, even though somewhat unsteady in his limbs; but he was so dazed that we had to wait hours before daring to descend. Finally, however, with my assistance, he did reach the solid ground in safety, even though still borne down by the weight of Yap Yap and the copious provisions strapped about his back.

By this time the deepening, weird shadows proclaimed that day was drawing to its close. And in a reddish twilight I led Daolgi to my parachute in the heart of the glade. The first necessity for us both was now the satisfaction of elemental needs, since not a drop of food or water had passed our lips for more than twenty-four hours. Of one accord we quenched our thirst from a pellucid little stream in one corner of the glade; and having sated our hunger (as well as that of the reviving Yap Yap) by means of compressed food from the parachute, we were at last ready to discuss our situation and to consider plans for the future.

IT was a strange talk that Daolgi and I had in that unknown, darkening spot, seated amid the thick vegetation, while about us blew the fresh breezes, warmer and more soothing to the senses than any breezes of earth. Gradually the stars came out in glimmering multitudes, precisely as they have come out for ages on our own world; yet each of us read in them a different meaning. For my own part, I saw in their sparkling brightness only the evidence that the intervening swarms of meteors were but as a film of dust, obscuring the heavens not perceptibly, if at all. Daolgi, in his turn, was chiefly concerned about the absence of a moon, suggesting that possibly this was a gross, prosaic world, devoid of magic and romance. But he was much interested—as was I also—in the presence of an unfamiliar celestial object: a radiantly brilliant object that, after an hour or two, rose above the treetops to the east. What a charming sight the earth can be—from a great distance! Daolgi remarked that doubtless the bards of Venus dedicated their verses to it, and he was conjecturing that probably many a golden love-scene had been consecrated by the earth-light, when suddenly I leapt to my feet in horror, remembering an oversight so gross as to be almost criminal.

"Our radio apparatus!" I gasped. "Our radio——"

I did not have to finish the sentence. The truth was only too apparent. In our haste to escape from the projectile, we had forgotten to provide ourselves with batteries for flashing messages back to earth!

In the dim starlight Daolgi and I turned to one another with blank, harried faces. We had now no way of making known our safe arrival in Venus! We were fated to disappear as inexplicably as did our predecessors! There seemed absolutely no hope—in vain the listeners at the radio would strain their ears for the glad tidings that would never come; misgivings would give way to alarm, and alarm to dreadful certainty, and at the end of another year two more wreaths would take their place in the Cenotaph of Lost Explorers. Of what avail now that we had taken the world-to-world flight?

In those first moments of bitter realization, what pained us most of all was the sense of our own impotence. We were helpless, pitifully helpless, mere castaways on a desert isle, an isle that no passing ship should ever hail. Our expedition had failed, and we could do nothing to redeem it—we might as well have been shrivelled by a meteorite and made our tomb amid the dust of space.

There was only one remote glimmer of hope—a glimmer so feeble as to be merely tantalizing: the possibility that, through my scientific knowledge, we should yet find means of devising a wireless equipment. But even the normally optimistic Daolgi regarded that possibility as being little better than a dream; and I was forced to agree that we had lost touch with the earth for all time.

For hours the poet and I planned and debated, but in the end our confusion was deeper than ever. And in the end sleep came to our rescue, and an overwhelming weariness bade us lose our troubles in oblivion.

CHAPTER V

Through the Enchanted Woods

MY slumber that night was profound and dreamless, and not even the loss of the radio apparatus could disturb my much needed repose. I awoke shortly after dawn, feeling greatly refreshed, and observed with surprise that Daolgi had already arisen, and was standing like one transfixed with wonder, peering at the great purple-tinged clouds of sunrise. But I hastily diverted his attention to more important subjects, and urged that we set out on a tour of exploration.

To this suggestion he assented with alacrity, confessing that he had had the same plan in mind. Even though we had lost touch with the earth, he had concluded that not all was lost: we might at least discover some essential facts about this world, and possibly find some clue to the whereabouts of Sani Par, Raii Lordo and the other lost explorers. But if (as seemed more than possible) they were no longer alive,

we might at least solve the mystery of their disappearance. In this purpose I concurred heartily, feeling (although not expressing) particular anxiety about the prospective discovery of Ardu Twell. Yet I was less optimistic than Daolgi. I pointed out that we were on a planet virtually as large as the earth, with an area of millions of square miles; so that, even assuming that the men and women had survived, it was not unlikely that they were thousands of miles away. Hence many months or even years might elapse before we had news of them.

But speculation was obviously futile. After a brief talk, we began our preparations for departure, consuming our breakfast of compressed protein tablets and making a pack out of the meager supplies for the parachute. Luckily—or perhaps unluckily—neither task required much time, and in less than an hour we were ready to set out.

Preceded by the energetic Yap Yap, who had recovered his good spirits upon leaving the projectile, we made our way into the deep woods, not knowing where we were going, and scarcely caring, and content to let chance be our guide. Or, to be precise, we were content to be piloted by Yap Yap, who trotted among the trees with wagging tail and nose that sniffed at a thousand unfamiliar objects, always avoiding the densest vegetation and singling out a rude and tortuous pathway. About us now was a perpetual twilight; the tall, straight trunks of the trees were massed like the columns of some magnificent cathedral; and far above us the vault of that cathedral was visible, daintily tapestried with twigs and verdure, almost black in places where the sun could not strike, and exquisitely tinged with green and red and golden and yellow where the meager sunlight illumined fleeting and fantastic leafy patterns.

Scarcely less remarkable was the luxuriant undergrowth. Clinging to some of the trunks was a white, fungus-like creeper, with long silky stems and fragile pale yellow blossoms that seemed of tissue paper; about other trunks a sort of gigantic lichen had woven itself, standing out vividly green against a background of reddish brown; and upon the ground were a multitude of vines and bushes, most of them gray and colorless and many apparently parasitic. Here would surely have been a life's work for any naturalist!—had I myself not had more compelling pursuits I should have liked nothing better than to study these plants: the long snaky ones with spidery black stems and tendrils devoid of leaf and bud; the gorgeous, spiny ones, whose orchid-like blossoms were encircled by javelin thorns half a foot long; the soft, mushroom-like variety, which, when trodden upon, emitted a nauseating odor; the white, hairy species, reminding me of upturned beards sprouting upon the earth's surface; and, above all, the little flowering shrub whose symmetrical limbs were half hidden by tiny blue-throated birds, which sang and sang in clear liquid tones that the poet likened to the unearthly music of the elves.

But these birds were far from the only ones that greeted us. The feathered life of the forest seemed almost as luxuriant as the vegetable life—and what thousands of hues and varieties, and what gaudy forms! By the side of these vividly apparelled songsters, the birds of paradise that once inhabited the earth were drab as crows! Some, no larger than sparrows, wore shimmering, iridescent gowns as airy and insubstantial as rainbowed spray; others, of the size of quail, had plumage marked and spotted like the leopard; many displayed garments of symmetrical and gorgeously artistic design, with curves and stripes and arabesques of black and green and purple and orange; and one, which appealed to the poet and myself as the most fascinating of all, was like a miniature swan—a swift-flying creature with body of a creamy white, and long, lithe neck from which issued a song reminding one of an accomplished violinist.

As Daolgi and I strolled through the woods, listening to the music of the birds, the sudden and shrill calls of mate to mate, the exultant carol of some peacock-hued minstrel, we scarcely thought of the possibility of encountering other forms of life. Of insects there were doubtless myriads, but they were unobtrusive; and the presence of small quadrupeds became evident whenever Yap Yap made one of his vain dashes after an invisible something rustling in the underbrush. We did have fears, it is true, lest some carnivorous monster, some coiling python or soft-padded panther, be lurking in some dark recess of our path; but there was no sign of any such prowler, and we were almost convinced that the planet—or, at least, this particular portion of it—was unfrequented by the larger mammals.

THEN suddenly we learned the need of caution. It was when we were most off guard that the disturbance arose. The increasing light ahead indicated that we were approaching a break in the forest, and Daolgi was drifting on absently before me, preceded as ever by the ambulatory Yap Yap. Suddenly I stopped short, and Daolgi stopped short, for through the latticed foliage proceeded the weirdest sounds we had ever heard—*suss hazz, suss hazz*—harsh, abrupt, hissing,—then *go guom, go guom, go guom*, in a swift series of varied rhythms, half like the guttural chattering of some thick-tongued bird, half like the throaty grunting of a beast of prey.

Terror-stricken, I remained rooted to the spot.—*Suss hazz, suss hazz, suss hazz*, the hissing noises were repeated, followed as before by the bestial *go guom, go guom, go guom*. . . . With hair fairly rising from my head, I peered through the massed leafage; two staring, close-lidded eyes met my own! I gasped, and felt my knees turn to water beneath me; my heart could have stopped from fright. But, at the same instant, a furious barking burst forth to reassure us. Simultaneously the strange eyes flashed from view, and there was a loud crashing amid the brush. Now the barking continued, but at an increasing distance; and now Daolgi, who had been as paralyzed as I, went plunging excitedly forward; and now, almost automatically, I followed, not pausing to ask whether I might not be rushing into the very teeth of danger.

Arriving at the opening in the woods, I beheld a sight that filled me with amazement and laughter. Across the leafless fields Yap Yap was dashing frantically, barking as we went; and before him fled several two-legged creatures, very slender and of about the height of chimpanzees, with close-fitting brown coverings about their hairy skins. Reaching the opposite fringe of the forest, these singular beings flung themselves upon the tree-trunks, and ascended with the agility of squirrels; and Yap Yap, after barking vainglorioously below, returned to us with wagging tail and a general demeanor of self-congratulation.

"Did you notice that?" cried the poet, recovering from his first spasm of laughter. "Did you notice that? The apes of this planet wear clothes!"

And while Daolgi gave way to renewed convulsions, I inwardly lamented my misfortune in having no time to study and scientifically to classify this animal.

But the discovery of this peculiar ape—apparently harmless though it was—warned us of the possibility, even the probability, of the existence of other and perhaps dangerous large mammals. And, for the first time, we asked ourselves whether Venus might not have a human population—was it not likely that where there were apes there would also be men? Our chief

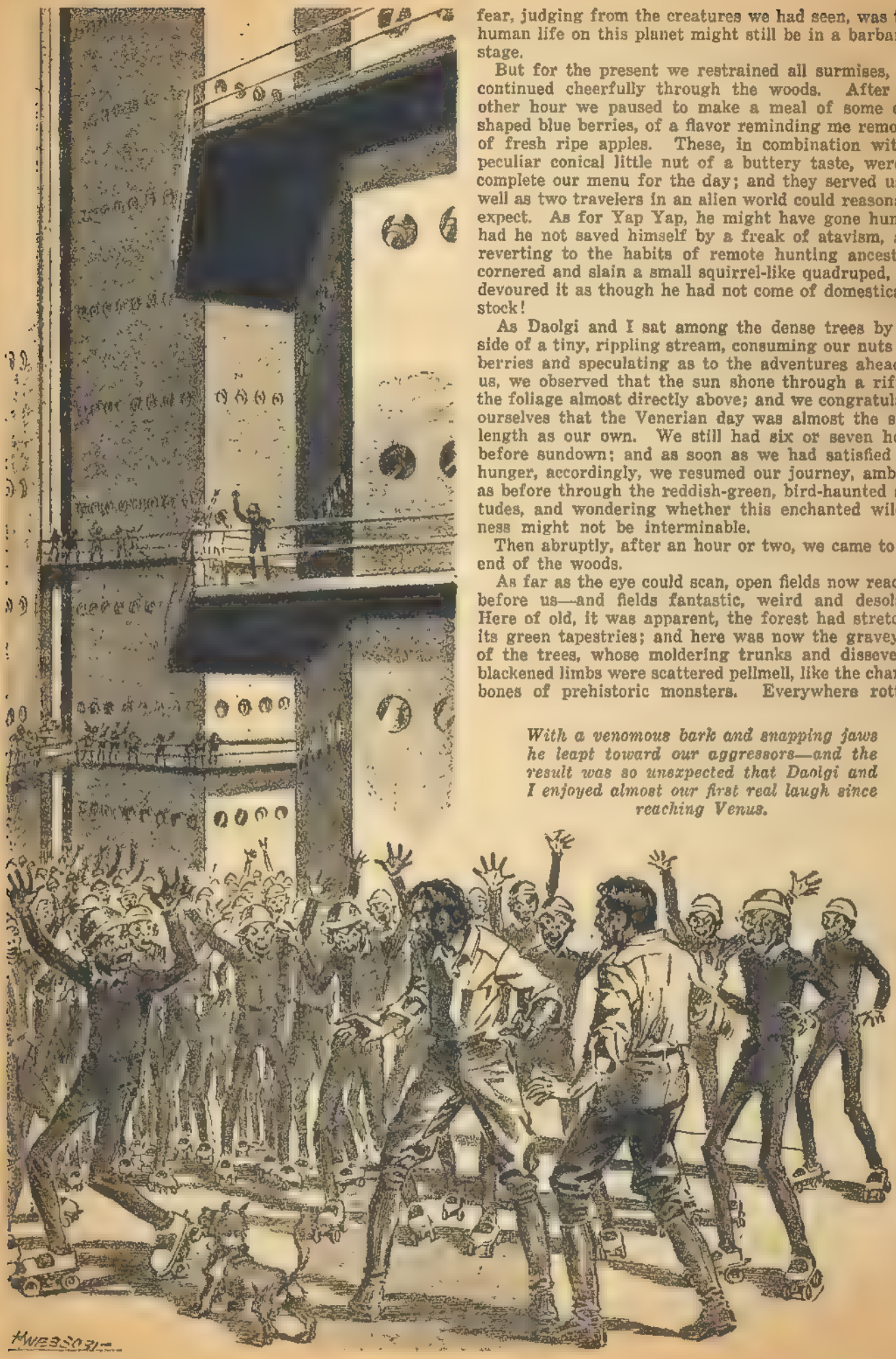
fear, judging from the creatures we had seen, was that human life on this planet might still be in a barbarian stage.

But for the present we restrained all surmises, and continued cheerfully through the woods. After another hour we paused to make a meal of some egg-shaped blue berries, of a flavor reminding me remotely of fresh ripe apples. These, in combination with a peculiar conical little nut of a buttery taste, were to complete our menu for the day; and they served us as well as two travelers in an alien world could reasonably expect. As for Yap Yap, he might have gone hungry had he not saved himself by a freak of atavism, and, reverting to the habits of remote hunting ancestors, cornered and slain a small squirrel-like quadruped, and devoured it as though he had not come of domesticated stock!

As Daolgi and I sat among the dense trees by the side of a tiny, rippling stream, consuming our nuts and berries and speculating as to the adventures ahead of us, we observed that the sun shone through a rift in the foliage almost directly above; and we congratulated ourselves that the Venerian day was almost the same length as our own. We still had six or seven hours before sundown; and as soon as we had satisfied our hunger, accordingly, we resumed our journey, ambling as before through the reddish-green, bird-haunted solitudes, and wondering whether this enchanted wilderness might not be interminable.

Then abruptly, after an hour or two, we came to the end of the woods.

As far as the eye could scan, open fields now reached before us—and fields fantastic, weird and desolate! Here of old, it was apparent, the forest had stretched its green tapestries; and here was now the graveyard of the trees, whose moldering trunks and dissevered, blackened limbs were scattered pellmell, like the charred bones of prehistoric monsters. Everywhere rotting



With a venomous bark and snapping jaws he leapt toward our aggressors—and the result was so unexpected that Daolgi and I enjoyed almost our first real laugh since reaching Venus.

stumps dotted the landscape, yet none were cut off evenly as by the axe or saw; and no two were of the same height, or seemed to have been broken off in the same fashion; and most wore black streaks or patches or else were entirely draped in mourning. It seemed as if some blight had fallen upon all the land, for not a weed grew between the melancholy stumps on the sooty, discolored soil; not a bird flitted among the stricken branches; not a moving thing broke the monotony from horizon to ashen horizon!

As the poet and I stood staring at the bleak spectacle, my eye chanced to fall on a queer, half-buried object that glittered oddly in the sunlight. With Daolgi's aid, I quickly unearthed it. It was a tarnished, rounded steel device, somewhat larger than a man's head. Within it, leering at us with hollow eyes, there gaped a ghastly thing that we recognized all too plainly—a weather-beaten, bullet-pierced, yellowing human skull!

Our doubts about the inhabitants of Venus were now at an end. We realized that the planet must indeed be populated by savages.

CHAPTER VI

Pitfalls of the Wilderness

UNTIL sunset Daolgi and I trudged steadily across the charred and deserted plain. If anything, it was even more desolate than we had imagined, for in places great, crater-like holes, which seemed blasted by meteorites, yawned from the lifeless soil; in places huge rusted masses of iron, a tangle of wrecked wheels and wires, confronted us like the battered playthings of the Titans. And once or twice we beheld a grewsome elongated whitish object sticking dismally from the soil, as though Death himself, with bony fingers, were warning us not to trespass.

Anxious as we were to escape from so melancholy a region, we could make but meager progress. The scattered and decaying multitudes of tree-trunks everywhere impeded us, and that night we were forced to make camp in this forbidding region, and to deliver ourselves over to dreams of fire-spurting devils and of grotesque clothed apes that seized us with hairy arms and throttled us slowly.

The following morning we were up with the sun, and started off without delay. Preceded no longer by Yap Yap, who skulked behind us now with frightened eyes and tail that forgot to wag, we set a rapid pace westward. Yet so wide was the desert that it was noon before we had reached its verge, and in all that time we had not seen a living thing, nor heard any cry of beast or bird, nor found one speck of food, nor tasted a drop of unpolluted water.

But, after several hours, the soil gradually became less black and the shattered tree-trunks showed signs of thinning. We could have offered up prayers of thanksgiving when, after still another hour, the first growing things appeared and we found ourselves approaching a long, low ridge dominated by a dense-clustered reed-like bush with thick, succulent stems.

Having partially satisfied our hunger at the expense of this plant, we mounted the ridge and were rewarded by a change of landscape. Beneath us spread a multi-colored plain, gently undulating as far as the eye could reach, and broken only at one point far to westward, where a hazy, dark mass seemed to denote the presence of hills. How fantastic and how picturesque were the outlines of this plain, with its many shades and gradations of brown and red and green and remote, dreamy blue! Had I consented to but an hour's delay, Daolgi might have been tempted to depict the scene in a poem; already I could see that his eyes were wearing that far-away look which betokens poetic inspiration, and that his hands were beating time to an inaudible music, while his lips were framing unconsciously the rhythm of the words. But I drove him back to reality by taking him firmly by the arm and racing him down the slope and (unintentionally) into a patch of thorny weeds that pricked him in a thousand places.

After the poet had recovered from the natural irritation following such rough treatment, we held a conference as to our future route. Daolgi did not consider it essential to have any route at all, but deemed it best to wander wherever inclination called. I had no patience, however, with such an illogical plan, and assured my friend that his sense of the romantic overshadowed his sound practical judgment. As Daolgi seemed disinclined to argue, my views prevailed; and we agreed upon a course, which I was many and many a time to lament. Interested by the thought of the dark hilly mass far in the distance, I insisted on continuing due west, regardless of the fact that the land in this direction seemed wilder and the bushes seemed higher and denser.

From the moment of our decision, all things began to go wrong. We had to work our way slowly among thick weeds, rocks, and almost impassable brush; once we encountered a swamp in which we sank up to the knees; constantly we were attended by swarms of bright red insects, half as large as wasps and twice as vicious; several times we saw large and venomous-looking lizards crouching in our path; once we caught sight of a grotesque animal, of the size of a fox and shaped like the armored dinosaurs that dwelt ages ago upon the earth; and on numerous occasions we heard suspicious squeals, mutterings and hissings. Added to this, we suffered every imaginable personal irritation: our hands grew red and swollen from contact with poisonous shrubs; our clothes were gashed and ripped by thorns until we were ragged and bleeding; our feet began to ache from treading on the sharp stones, and our nostrils revolted at a thousand odors; small blood-sucking creatures bit through our garments, fastening themselves, leech-like, to our legs.

That evening we made camp by a bank of a fairly large stream that we forded with no great difficulty; and the following morning, while wandering close to the water, gathering my breakfast from the large luscious berries of a half-aquatic plant, I made a surprising discovery.

Half buried in the mud at the river's edge, a tiny bit of metal caught my eye. It was but three or four inches in length, and was badly rusted; yet, as I drew it from the soil, I recognized its nature in amazement.

"Come quick! Quick! Come! See!" I called to Daolgi, rushing toward him and waving the object in uncontrollable excitement. "Look! See! A penknife!"

"What's that?" mumbled the poet, in matter-of-fact tones, as he took my find from me and inspected it gravely. "A penknife? What of it? It's too rusty to be any good!"

"But don't you understand," I started to expostulate, then broke abruptly short, for a gleam in the poet's eyes made me realize that I was wasting my breath.

IN an instant it became apparent that his interest in the knife was equal to my own. Together we examined it eagerly, scrutinizing every dent and marking with scrupulous care. For a moment we detected nothing extraordinary; then, half blotted out by time and rust, we distinguished two initials.

Those initials were in a familiar alphabet!

"S. P." read Daolgi, with difficulty. Then, with wild, gleaming eyes, he cried, "The initials of Sani Par!"

"Sani Par! The initials of Sani Par!" I repeated, recalling one of the earliest Venerian explorers. "How under heaven——"

"Look at this!" interrupted Daolgi, in tones of horror. "Just look!" And he pointed to the large blade of the knife, which he had just snapped open.

It was broken off near the center; and the ragged edge showed a faded red, like ancient blood-marks.

For a moment we stared thunderstruck at this grewsome evidence. "At least, he probably did reach this planet," I at length pleaded, trying to summon up some faint optimism.

"Yes, but how long did he live here?" muttered Daolgi, shaking his head sadly.

And to that question neither of us attempted a reply. . . .

"But we can't be sure of anything, can we?" I cut short the silence. "Let's look carefully—maybe we'll find some sign of him—or of the other explorers."

But though we searched eagerly for the rest of that day, we could find not another clue. Apparently for years the wilderness had been undisturbed by human presence. And after raking up the river bank and searching among the bushes for yards about, we had to abandon the quest.

Yet all the rest of that day I was haunted by visions of Sani Par wrestling with bloodthirsty beasts and blood-streaked barbarians, with no weapon but a penknife. And all the rest of that day I had visions of the vivacious, black eyes of Ardu Twell—for if Sani Par had reached this planet, might not she too have arrived? Meditating on the possibility of finding further traces of the lost ones, I was feverishly anxious to continue our explorations—who knew but that the morrow would bring us face to face with our lost fellows?

Little did we guess what the morrow was to bring!

The last purple gleam was not yet extinguished in the east when we were again on our way, clambering up the bush-clad undulating ridges, or slowly tracing a trail down the steep slopes. At times, from some exceptional eminence, we caught glimpses of the distant hilly mass; and gradually it appeared to be drawing closer, more ample in dimensions and less hazy in outlines. Then by degrees it took on a hue of slaty gray, and its perpendicular sides and horizontal summit became sharply accentuated, so that it looked like a long, iron rectangular body cut out with geometrical precision by titanic chisels.

Never before had I observed so remarkable a geological formation. I became actually excited at the prospect of a unique, scientific discovery, and hastened my footsteps in my eagerness, while the poet dragged contemptuously behind, grumbling as he tore his already tattered clothes on the thorny vines. But I was bent on wasting as little time as possible; and, pausing only to gather our meal of berries and nuts, we kept steadily on our way till twilight.

That evening we made camp in a little open space on the crest of a ridge. Beneath us and all around us spread dense bushes varied by scraggly trees with fan-like leaves; and a few miles to westward, ominously black against the red flare of sunset, loomed that bare and gigantic, singularly regular hilly formation.

"How like some ancient deserted fortification!" mused the poet. . . . "How like the black cliff dwellings of gigantic ants that wall themselves in from the sunlight and the day!"

Before I had had time to express my disgust at this extravagant outburst, we witnessed a spectacle that petrified us both with astonishment. The western hills were no longer black and bare; they were glorified and transfigured with light. In less time than a meteor takes to streak across the skies, the drabness of the hill was dissipated, and they were kindled with a golden glow, while a halo of pale yellow overspread the skies about them and mingled with and enriched the dying tints of sunset.

Our first awed thought was of a conflagration, an overwhelming, volcanic conflagration. But, as we stood watching, terrified and yet fascinated, there was no sign of the blazes we had expected, but all remained still and serene, and the strangely transmuted hills shone with a brilliant and yet a steady light.

"Come, let's go away!" cried the poet, with sudden vehemence. "Let's go away! Make haste! These hills are bewitched!"

And, as if in confirmation of his warning, an uncanny sight flashed before our eyes. At the edge of the brush, not a hundred yards below, a wavering blaze of intense yellow sprang forth, wreathed in a sulphurous, eerie mist. And out of the woods and into that strange flickering light came half a dozen dark shapes, thin as frail youths, yet seeming monstrous as giants; and with fantastic gestures those mysterious shapes bent and swayed about the flames. And the fire sprang higher, and the shadows loomed longer, and the figures seemed taller, and their motions became faster and more excited, and the sparks scintillated and flew and the odor of smoke was in our nostrils and the terror of death was in our hearts. . . . And what happened next I cannot say, for at headlong speed, risking my limbs and life, I followed Daolgi down the opposite slope and into the safety of the bushes. . . . For the time, I was inclined to agree that this world was indeed bewitched.

BUT the following morning, beneath the heartening light of day, Daolgi and I gathered courage, and proceeded cautiously to the scene of the evening's weird spectacle. We were not long in finding the place—and in discovering how ridiculous we had been. Scattered about the ground were the burnt-out ashes of a camp-fire, with a little curving wall of blackened rocks as an improvised shelter for the flames. Near those rocks lay a quantity of tiny, charred bones, which upon observation proved to be the remains of birds; and among these I noticed a little steel utensil of about the size and shape of a small frying pan.

It was now suddenly apparent why the fire had sprung up so swiftly. Not only had it been fed upon dried leaves and twigs and other exceedingly combustible material, but the atmosphere was doubtless richer in oxygen than is that of the earth. It even occurred to me that the peculiar chemical odor I had noted upon first reaching the planet was partly due to the presence of ozone; and I concluded that this active gas was omnipresent.

But who were the makers of the fire? Could any of our fellows from the earth have been among them? Surely, however, they could not have descended to eating flesh!

Our only course, I concluded, was to continue toward the strange hilly mass, which, I was beginning to suspect, was more than an unusual geological formation. There we might unravel the mystery of the fire.

As we approached our destination, we received confirmation of this verdict. The dark eminence—now truly dark again, since the lights of the preceding evening had vanished—took on more distinct and more surprising outlines as we drew nearer. It retained all its regularity of form and proportion, but seemed to be threaded perpendicularly by a series of faint lines, dimmer in hue than the surrounding slaty mass, and traversing it at even intervals, counting from extreme right to extreme left. Excitedly I was forced to acknowledge that this was undoubtedly the abode of men.

But what sort of men could have erected so strange a dwelling? Spurred on by curiosity I hastened my footsteps, while the poet insisted that it would be well to go slowly and with circumspection. He thought that we might do best to avoid all association with the

men of this planet; and I could silence him only by pleading how necessary it was to find human beings and to make use of human tools, if we were ever to construct an interplanetary radio device and so to fulfill the object of our expedition.

As the miles between us and our goal diminished, the country became more level and less broken by bushes, rocks and weeds. The morning was not more than half gone when our destination loomed monstrous before us, a long, low hilly ridge blotting out half the western horizon. Over its summit dim films of smoke were wreathed in voluminous curls and spirals and, as we approached, the smoke grew denser and darker, and spread upward like some malevolent destroyer. At length the black, snaky bands stretched toward the violent peak of the heavens, and long murky streamers reached outward and upward like the arms of some sky-filling octopus, and an ashen veil was drawn by invisible hands across half the western heavens, and the wounded sun shone palely through a foggy film and cast a red glare downward.

And as the smoke lifted its victorious flags higher and higher, a strange odor was borne to us upon the wind—an odor like nothing we had ever known before. In part it was fetid like the breath of some great beast of prey and in part was rancid and nauseating like the smell of decaying vegetation; and in part pungent like the stench of a chemical laboratory where many bottles have been broken. But on the whole it was unfamiliar as the very hills and cliffs from which it emerged. All that I can say definitely is that it was unpleasant, unpleasant as contact with things long decaying and dead, so unpleasant that the poet held his nose in disgust and entreated me repeatedly to turn back. But, with savage determination, I pressed unswervingly onward, unmindful alike of the smoke and the sickly odors and the increasing wind that lashed us with incessant gusts and volleys, as if it would warn us, as if it would implore us, as if it would force us to turn back and avoid the threatening doom.

Before the sun had dropped from view that evening, I was to reach my destination, and to find cause for regretting my scorn of the poet's warning and of that portentous warning flashed from wind and sky.

CHAPTER VII

The Iron City

IF we had been given to fantastic conjectures as to the nature of the dark hilly formation, we were to discover that we had erred only on the side of moderation. When at length we stood in the shadow of the cliffs, we found proof of our surmise that they were of artificial origin. From horizon to horizon loomed a succession of massive towers, towers strangely identical in size and construction: all were of an even height of four or five hundred feet; all had regular hexagonal sides and flat, unadorned summits; all were separated from their neighbors by slits of twilight sixty or seventy feet in width; all displayed horizontal row upon row of little round apertures reminding me of windows; and all were of the uniform hue of clouds on a rainy day.

As we approached one of the dimly lighted aisles between the steep flanks of two towers, a disconcerting noise came to our ears—a low drone, like the murmuring of multitudinous bees, but broken at short and irregular intervals by loud rumblings, shrieks and gratings, and a shrill metallic crashing and clattering.

Once again, when our goal was within a stone's throw, Daolgi urged that we turn and flee. But I laughed once again at his warning, and half angrily pressed forward to the very base of the towers.

How shall I describe that scene, which was at once the maddest and the most unforgettable I have ever beheld? So many diverse impressions came flocking to my mind that I find difficulty in recording them all. At the first glance, I knew that we stood at the entrance to a city, an incredible, crowded city, populated with an amazing people. Before me they darted in swarms, not more than five feet in height and slenderer than the slenderest stripling, with pallid bluish skins and tiny marble-like black eyes. And with what tremendous velocity they slid along the iron pavements, veering and swerving on some queer mechanical contrivance reminding me of roller skates!—skimming along so rapidly that I marveled that they did not collide, marveled at the precision and skill with which they would miss one another by a hair's breadth.

All this I observed in the flash of an eye, and in the flash of an eye I caught a clear glimpse of one of the natives, who paused to regard us with a stare of curiosity and fear. In that instant I recognized him as akin to the clothed apes we had encountered in the wilderness! And in the same instant he seemed to recognize us as being outlandish and strange for he sent up a blood-chilling cry that was half a bark of defiance and half a scream of terror.

It was too late, or we would have taken to our heels. But, as if by an electric impulse, the great turbulent crowd had become transfixed and silent; hundreds of pairs of dark, weazel eyes were peering at us in amazement and alarm. And as we stood hovering there in uncertainty, not knowing whether to speak, not knowing how to escape, blue-skinned creatures forced their way out of the throng, and several of them advanced toward us with thin arms waving menacingly. What would have been the upshot I do not know, had not Yap Yap decided to act in the crisis. With a venomous bark and snapping jaws he leapt toward our aggressors —and the result was so unexpected that Daolgi and I enjoyed almost our first real laugh since reaching Venus.

Apparently dogs—or, at least, tame dogs—were unknown on this planet; Yap Yap was greeted as a man-eating wolf might be greeted on earth. There was a pandemonium of terrified shrieks, yelps and howls; there was every sign of a panic in the haste with which the people jostled one another, pushed and pounded one another, tramped over one another in their frenzy to escape. Then, as when a picture flashes from a screen and is gone, the multitude vanished, rolling away at incredible speed upon their odd little foot-wheels; and Daolgi and I found ourselves alone in this extraordinary city.

NOW, for the first time we had the chance for an uninterrupted view of our surroundings. We were at the entrance to a street not more than a hundred yards long—the length of one of the sides of the hexagonal buildings—and at the end of this short thoroughfare loomed another tower, equal in size to those to our right and left, and indicating that the city was composed of uniform six-sided blocks patterned after the cells in a beehive. Above us, at a height of from ten to twenty feet, and completely encompassing all the buildings within our view, were two gray steel platforms, one above the other, each perhaps fifteen feet in width, and each bordered by fence-like railings; and from these platforms there issued an intermittent series of nerve-racking groans, rumblings and rattlings. The towers themselves, like the projections that surrounded them, were constructed exclusively of steel painted a leaden gray and their cliff-like walls were broken at the base only by a series of small oblong openings reminding me of the entrances to anthills. The effect of the whole was de-

pressing, unspeakably depressing; and as we gazed upon the town in its naked ugliness, and reflected that this was perhaps typical of the highest culture upon Venus, Daolgi and I both experienced a profound nostalgia, a sense of bereavement, a longing for the old familiar fields and spires of that world from which we were exiled forever.

Fortunately, however, we had little time for sentimental reflections. After the blue-skinned people had retreated, Daolgi urged for the last time that we also retreat before it was too late. But, as was always my wont, I merely smiled at the poet's apprehensions, assuring him that we were in no danger from these reed-like pygmies. With our six-foot frames and our tattered, outlandish clothes, our bronzed skins, and faces bushy with seven weeks' growth of beard, we must be objects of terror to them even without the aid of Yap Yap.

Reluctantly Daolgi accompanied me as I followed the short street to its end, and, turning at the obtuse angle of the corner, found myself in another street of equal dimensions. Upon reaching the intersection, we came face to face with half a score of the natives, at whom Yap Yap flew with vociferous barking, with the result that they shrieked, wheeled about, and glided away at lightning speed. We followed as rapidly as we could, and at the next corner much the same performance was repeated, a number of the inhabitants fleeing panic-stricken from our canine protector, who appeared to be enjoying himself immensely, and walked with head proudly erect, eyes and ears alert, and curling lip withdrawn from glistening teeth, after the manner of one who has found his place in the world and means to assert himself.

But as we advanced, turning corner after corner of the unending, hexagonal blocks, the streets were becoming ominously deserted, as though the warning of our presence had been flashed throughout the city. Through transparent, gray slits in the oblong doors we caught glimpses of ferret eyes staring at us wonderingly, and darting away in alarm whenever we peered in their direction. Complete silence had set in; the rattlings and rumblings from above had ceased; and, as we passed through the somber, iron-walled streets, the deadly quiet seemed like the calm that precedes disaster. Gladly we would have fled, but we were lost amid the labyrinth of streets; a harrowing sense of imprisonment overtook us as we surveyed the precipitous dark towers; gradually, inexplicably, the feeling came to us that we were walking into a trap, a silent, sinister trap that would spring as soon as we had stepped into its shadow.

Very cautiously we advanced, and very slowly,—very carefully we watched our every footfall—very fearfully we gazed into the walls of the buildings, the gray platforms above, and the curious little doors, ever on the alert for possible pitfalls. Yet somehow we were aware that all our efforts were wasted. Somehow we could sympathize with the fly that invaded the spider's web. Even Yap Yap seemed to be growing depressed; even Yap Yap began to walk moodily, with drooping head and dragging tail, as though discouraged that there was no longer anyone on whom to exercise his talents.

But this inactivity was to be short-lived. As we reached one of the countless street intersections, Yap Yap leapt forward with a snarl and a growl; and suddenly we found ourselves surrounded by blue-skins—blue-skins clad in metallic uniforms that shone dully and that rattled and clattered as they walked! Simultaneously, and as if by magic, swarms of them had sprung from the doors of buildings and from trap-doors in the street!

The mere sight of these armored police—for such they seemed to be—was enough to strike horror to the hearts of the valorous. And, alas! they did strike terror to the heart of the almost-valorous Yap Yap! Having started toward them with a rush of gallant barking, and discovering to this surprise that they did not flee, he was apparently uncertain what to do. Instead of hurling himself at their throats, he was content to pause at a safe distance and to growl and mutter pugnaciously. At the same time, a sudden volley of low explosive crackles came from the spectators—crackles suspiciously like laughter.

The next moment the blue-skins appeared to be making the mistake of judging us by our dog. Evidently placing our courage on a level with Yap Yap's several of them approached us menacingly, and one of the boldest went so far as to stab at me with his puny mailed fist. Merely by way of warning, I seized him with both arms and flung him bodily into the crowd: whereat the spectators appeared to regain their lost respect for us.

AFTER our would-be assailant had gone hobbling away, our remaining opponents decided upon gentler methods. Several of them rolled to within ten yards of us, and began speaking in the most extraordinary language I had ever had the ill fortune to hear. "Wugi, gugi, wugi, wugi, wugim, wug," were the words, as nearly as I can remember; and they were pronounced in hoarse, throaty tones unpleasant as the grunting of a bear. Of course, neither Daolgi nor I had any answer to make; but after the words had been repeated in louder tones, and then repeated in tones louder still, excited whisperings and mumblings began to sweep through the crowd, and we foresaw that the next development might be less simple and slightly more unpleasant.

All of a sudden a pandemonium of thick-voiced chattering broke forth, as though each of the pygmies had some exciting information to impart. At the same time I observed that the crowd was deepening incessantly, so that row after row of little black eyes were darting enmity at us, some as far off as the further cliff-like boundary of the street. If escape had been doubtful before, it was ten times more so now. Yet both Daolgi and I were determined to fight, to fight, if need be, to the last drop of blood.

It was a metallic clanking and chattering behind us, accompanied by a buzzing as of an electric motor, that warned us of the presence of some new offensive implement. But the warning came a fraction of a second too late—before we had had time to wheel about and confront the fresh menace, a coil of wire fell around my shoulders and descended to my feet. And no sooner had I leaped free of this entanglement than a second coil wrapped itself about me, clutching tightly at my knees. And the second was followed by a third, and a third by a fourth; in an instant my legs had been bound helplessly together and my arms fastened immovably to my sides. With the fifth coil, which caught me about the neck and came near to strangling me, I staggered and toppled to the pavement.

As I fell, I caught a glimpse of a rapidly rotating machine whirling out loop after loop of wire. And it came to me cloudily that the tall form of the poet, enmeshed like myself, lay prostrate in the midst of the swarming pygmies.

What happened next I cannot say. Perhaps I struck my head a dazing blow in falling, or perhaps I was beaten almost to insensibility, for all was blurred and troubled as in a nightmare. There was a tumult of vague noises; there was the helpless sense that I was being gagged and blinded, pushed, pounded and trampled upon; there was the sensation of stifling, the impotent, terrible sensation of gasping for air; there

was the feeling that I was being lifted, bodily lifted and borne away through interminable caverns; there was the sudden, thudding pain with which I was thrust somewhere to a resting place, while all about me echoed and re-echoed a tumult of dolorous groans and demoniac bellowings and shrieks. As I lay there, in stupefaction too deep for fear and confusion, too deep for wonder, it seemed that a strange silence stole down upon me, a strange silence and a darkness—and oblivion rolled over me in one great, world-consuming wave.

CHAPTER VIII

Caged

WHEN next I opened my eyes, a foggy gray twilight enclosed me, and I could not imagine where I was. Whether it was the twilight of evening or of dawn was not apparent, until by degrees the increasing light signified the advent of day. Then gradually, as the haze lifted, I made out a few grotesque details. I was lying on a bed of irregular rock; and on all sides of me and above me, confining me within a space not more than fifteen feet square, was a series of steel bars, half an inch thick and paralleling each other at intervals of four or five inches. Self-evident as the nature of this barricade should have been, it was minutes before I recognized it for what it really was—not a prison such as our barbarous forebears employed thousands of millenniums ago for the torture of unfortunate humans, but a cage such as they used for the exhibition of wild animals!

At first this idea appeared so incredible that I doubted the testimony of my own senses. Yet I was forced to credit that testimony when I looked about me more carefully, and discovered evidence piled upon evidence too plainly for dispute. Beyond the cage-walls to my right was another barred compartment, and in that compartment the tall figure of a man, the very image of dejection, standing with hands desperately clutching the steel grating—the poet, Daolgi Kar! I was about to call to him, when a familiar howl from the opposite direction distracted me—peering at me with mournful eyes and vainly striving to slip his furry muzzle between the bars, I observed our old friend, Yap Yap!

Gradually, as I stood there staring at my two companions, the features of my environment impressed themselves grimly upon me. My cage, like Daolgi's and also like Yap Yap's, was marked at one corner by a small rocky cave, barely large enough to contain the huddled figure of a man—my only refuge in case of inclement weather! At the opposite corner a pool of muddy water, six feet long and of indeterminate depth, offered the sole visible bathing facilities. Beyond this, there was no provision for cleanliness or comfort; while the nauseating stench that pervaded the air did not seem to recommend the sanitation of the place.

But that stench might have been accounted for otherwise than by the condition of our own cages.. The barred compartments that held Daolgi, Yap Yap and myself, were only three out of dozens, and formed part of a long row of similar compartments. Directly across from us, both in front and to the rear, were other lines of cages, separated only by aisles six or eight feet wide; and beyond these still others, the whole being grouped in hexagonal formation, the shape and size of one of the Venerian city blocks. We seemed, indeed, to be located in a city block miraculously spared from the iron towers; and on all sides of us rose the sheer gray walls, which overshadowed us perpetually and gave us the feeling of being dwellers in a deep pit.

But what immediately held my attention was not the number of the cages, nor the bleak walls that bounded them, but rather their singular inhabitants. Never before had I encountered such animals! Here, in the actual flesh, were creatures such as were found on earth only in a few crumbling bones!—here were members of whole families and orders of creatures such as never had been found on earth at all! A blind man would have known that they were unique in kind, for their incessant mumbling, muttering, shrieking, squeaking, screeching, bellowing, howling, groaning, hissing, wailing and roaring were of a variety and a savagery never known on our planet. And the appearance of the beasts was in accord with the quality of their voices—a more bloodthirsty-looking assemblage could hardly be imagined! Occupying a steel-barred tank of water just opposite me was a black, red-lipped creature reminding me of an overgrown crocodile; near this was a tan-colored quadruped about ten feet long, with neck and tail fantastically out of proportion and head fantastically small—one of the dinosaurs, whose kindred on earth perished ages ago! And, in the cage adjoining this living anachronism, dwelt an ungainly ostrich-sized gray bird, with great hooked beak and short wings useless for flying—a gigantic relative of the long-extinct dodo!

It would be pointless to describe in detail all the various monsters and monstrosities and freaks of nature. It will be sufficient, in pasing, to mention the sabre-toothed ape, an idiotic-looking brute with long curling tusks that could rip a man to mincemeat; the six-legged fox, a skulking creature with venomous red eyes and long jaws constantly snapping; the land octopus, a spidery monster ten feet tall, which propelled itself noiselessly by means of eight treacherous, slimy limbs; the lantern-lidded serpent, a boa-like creature whose eyes even in the daytime glowed with sepulchral phosphorescence; the giant beetle, a brilliant crimson and black insect two feet long, which emitted a constant whirring like a buzz-saw; and the albino monkey, a clownish, grimacing simian with blond hair and skin, and with eyes of flawless, bluish white.

IN the beginning, unfortunately, I did not have time for observing my fellow prisoners. It was not long before my attention was distracted by a series of extraordinary events, the first and not the least humiliating of which was the arrival of breakfast. A sudden increase in the volume of the already voluminous shrieks and howlings informed me that something unexpected was in store; and, glancing down the aisle to the left, I beheld half a dozen of our blue-skinned captors rolling toward us alongside of a three-wheeled red cart that moved apparently of its own volition. Every few seconds, as they passed among the cages, each of the blue-skins would dip into the cart with a five-pronged spear, pull forth a bloody crimson mass, and push this loathsome morsel between the bars; whereat, with ravenous bellowings and greedy growls, the favored beast would snatch and devour its booty.

I wondered what would happen when the food-dispensers reached Daogli and me—and I did not have long to wait. I was not surprised, of course, to see Yap Yap supplied with a portion of raw meat, and to observe how readily he reverted to distant ancestral habits and devoured the carrion—but I did not actually believe that the blue-skins would try to attract us with a similar diet. Upon reaching my cage, they paused perceptibly, as if not quite certain whether I were carnivorous; but the hesitation was only momentary—into the cage forthwith came an enormous chunk of ghastly pale-red flesh, at least large enough for a polar bear. And into Daolgi's cage, at the same time, they thrust a leg of some animal as big as a sheep!

Naturally, we were only disgusted at such cannibalistic fare and kept as far as possible from those charnal fragments. But it was no consolation to view this culminating proof of the savagery of Venus and to reflect that probably we should starve to death.

Returning some time later to clear away the remnants of the feast, the keepers observed that we had left the food untouched. At first they tried pushing the meat to us with their five-pointed spears, as though we had been stupid enough not to notice it; then, after a whispered conference, one of them withdrew, to reappear in a moment with an amazing burden—a pile of a stringy, straw-colored substance reminding us of hay! This they thrust into our cages with the evident expectation that we would pounce upon it! But upon finding that this also was scorned, they uttered exclamations of surprise, and, apparently giving us up as hopeless, rolled swiftly away once more.

A minute after their departure, a new distraction appeared. A gong sounded brazenly from the towers above; and as I turned to note the cause, a second stroke clanged forth, and then still another, and still another, until I had counted fifteen in all, and the echoes pealed and resounded even above the wailing of the beasts. What could this mean? I thought. And even as I wondered I observed the answer. It seemed as if the living tidegates had been thrust open; down the long aisles, deserted but a moment before, rolled troops and squadrons of shouting, cheering blue-skins, most of them decked with banners of red and purple and yellow, and the great majority of diminutive size—not more than three or four feet in height.

Manifestly, these were the children of the city, and it was for the amusement of children that Daolgi and I were being exhibited in these bestial quarters!

We were not flattered to discover that we were the chief attractions of the menagerie. The occupants of the other cages, as befits old acquaintances, received but casual and contemptuous glances; but Daolgi and Yap Yap and I—and particularly Daolgi—constituted the especial delight of the screaming, grimacing groups. I do not know why the poet should have been more popular than I, but perhaps it was on account of his spectacles, which the observers pointed out with surprised exclamations. Or perhaps it was because of the expression of disgust with which he turned up his nose at the pygmies; or perhaps because of his long spidery limbs and elongated scholarly face, which may have rendered him peculiarly ugly and attractive to the childish imagination.

At all events, I soon had cause to be jealous of the attention he received. For that attention was to save him from starvation. Apparently by way of experiment, one of the more prankish lads drew a large conical nut from his pocket and threw it into Daolgi's cage. Seeing the eagerness with which the poet seized and devoured this offering, the youthful experimenter repeated the test with similar results: at which the others, whose pockets were bulging with the nuts, gleefully followed his lead, making Daolgi the center of a veritable shower of food.

But none of the audience saw fit to favor me with any nuts at all, and at first I had to be content with one or two that rolled into my cage by accident. Had not Daolgi noticed how I was being neglected and shared his supply with me, I certainly should have gone hungry for the day.

After about forty or fifty minutes, the gong in the tower sounded sonorously sixteen times; and, with a flurry of excited crackles, the children rolled away. For the rest of the day a procession of adult blue-skins moved contemplatively along the aisle before our cages, thereby presenting as much of a spectacle to us as we did to them. Always they paused to survey us from exactly the same vantage point; always they made precisely the same gestures in precisely the same way; always they began and ended with conversation with the same remark. It seemed that they might not have been living at all, but merely have been moved by clockwork; it seemed that they might have been mechanical toys to which an adroit intelligence had given the aspect of life. Unlike the children, they displayed no originality, no spontaneity, no individual tastes or differences; they all rolled along the aisle at the same even pace, they all spoke in the same subdued tones, they all wore the same drab close-fitting garb; and for us it was impossible to say which was man and which woman.

Yet it was fortunate for us that the blue-skins were little more than breathing automatons. By their stereotyped actions they gave us our first instruction in Venerian speech and manners. From the beginning, Daolgi and I commenced to pick up certain words of the vernacular—words that we carefully treasured for possible future use. For example, whenever one of the adults paused before our cages, he would point his left thumb at us, and utter a distinct, "Gug, gug!" It was not difficult for us to determine that "Gug, gug" was the local equivalent of "Look, look!" To these words the listener would invariably respond, in tones of horror, "Wegi, wegi!"; and we were not long in concluding that "wegi" was to be translated as "frightful" or "terrible." Again, the spectators had a habit of pointing curiously to our feet, which were much longer than theirs and were enclosed in battered boots of synthetic leather; and in such cases would always pronounce the word "Thutti", which we interpreted as Venerian for "foot." And frequently they would note the nut shells scattered on the floor of the cage, and would remark, in tones of pleasure, "Kugi, kig, kugi kig"—and thus we learned the native designation for nut.

It was not rapid work, but through close observation and careful reasoning we ascertained the approximate meaning of ten or twelve words the first day, and those Daolgi painstakingly recorded in his notebook. With their aid we hoped to progress faster to-morrow, and ultimately to acquire enough of a vocabulary to converse with our captors.

CHAPTER IX

An Unpleasant Experiment

HOW we endured our first two weeks of captivity is a question I shall never be able to answer. My memory of that unspeakable period is blurred and blunted, and I can recall but a nightmare sequence of fantastic events. Vaguely, as in recollection of some appalling dream, I can bring to mind the daily chattering throngs that gazed vacuously into our prison, with never a trace of pity and never a gleam of imagination; I can remember how they would throw nuts into our cages, and even a little cucumber-shaped fruit, flavored like the strawberry, apparently deriving immense satisfaction from the mere fact that we could eat—and apparently never realizing that these scattered morsels were our sole provision against starvation.

But in spite of the nuts and fruit, we did not always notice these insipid crowds. At times the heat at noonday was so intense that we could do nothing but sprawl wretchedly in our caves; and at times there were thunder storms of a violence unparalleled on earth, when the lightning stabbed at us in blue streaks, and the heavens grew black and rang and rattled with long-rumbling detonations, and the torrential rains flooded our cages until we stood inches deep in the deluge.

Thoughts of escape were, of course, continually in our minds, and could we have dug a precarious path to freedom, we would not have hesitated though it had been watered with our blood. But how escape when the bars about us and above us were of steel and showed no flaw nor any sign of yielding? How escape, when beneath the rocky floor of our cages stretched a wall of iron, impenetrable and of unknown thickness? How escape when we had no tools except our hands, and no weapons save our native wit?

Had it not been for our attempt to learn the Venerian language, and our measurable success in acquiring new words and phrases, we should certainly have despaired. Even as it was, despair was never further than elbow-distance, and the once-optimistic Daolgi was growing as moody as I. We remembered the object of our mission, and how the savagery of the Venerians had frustrated it; we told ourselves that even now Sani Par and his fellow explorers might be waiting on this planet, in need of our help while we lingered here unable to give it. And, as a thousand times before, since reaching this detestable world, I thought of Ardu Twell, and wondered whether that brilliant, beautiful girl might not, like us, be wasting away in some menagerie. . . .

It was not until our fifteenth day of captivity that the messengers of delivery arrived—or, rather, as we at first believed, the messengers of doom. Then it was that we received three visitors who were not the mere casual seekers after amusement. To my eyes they were indistinguishable from the multitudes of their brothers and sisters; yet, unlike the others, they seemed to have some important purpose in view. They peered at us long and intently, from every angle and every vantage point; one of them confided frequent notes to a large red-marked gray book, writing in tiny characters from

As I fell I caught a glimpse of a rapidly rotating machine whirling out loop after loop of wire. And it came so cloudily that the tall form of the poet, enmeshed like myself, lay prostrate in the midst of the swarming pygmies.

the bottom of the page upward; another, with swift strokes, made some excessively crude sketches of the poet, Yap Yap and myself; while the business of the third apparently was to keep up an incessant babbling.

The boldest of the visitors even seemed inclined to enter our cages. Tentatively, by way of testing our savagery, he thrust his hand between the cell-bars. But, unfortunately, he selected the wrong cage; Yap Yap, seeing his privacy invaded, dashed toward the offending hand barking ferociously: whereat the intruder screamed in terror and retreated barely in time to save his skin. All three spectators now began to whisper among themselves, and I could imagine that they were holding a scientific consultation.

This idea was confirmed when one of them reached for a long paper in an inner pocket, unfolded it, and exhibited it eagerly to his companions. From the interested grimaces with which the three blue-skins inspected it, and from the sidelong glances they cast meanwhile at the recently made drawings of us, I became curious as to its nature. Very slowly and cautiously, careful not to attract attention, I crept forward till I was so close as to be able to peer over the shoulders of the blue-skins. What they were displaying was a sort of crude sketch! One glance of it was all I could get before they observed me—but one glance was enough to fill me with amazement, hope and dismay. Rude caricature though it was, it was recognizable as the picture of a woman—and not one of the stereotyped, man-like women of Venus, but a girl of my own race, robed in the flowery mantle that is the distinctive feminine costume on earth!

For the rest of that day I was like one who has seen a vision. A great exaltation came over me as I realized that Ardu Twell was perhaps alive—perhaps not far off at this very moment! But an equal depression weighed me down as I thought what the probable fate of such a girl among such a people would be. After all, was it not too much to expect that she had survived?—that any travelers from the earth could long survive on this inhuman planet?

That night my slumber was colored with dreams of Ardu. It seemed that she was calling to me, calling and waiting in a mist; I saw her hands reach out to me—then her face and her gleaming eyes, tenderer than ever on earth; and she beckoned to me, and I stumbled on to her, while she still was half hidden in a fog. "I have been waiting, waiting, so long!" I heard her say; and the fog fell away from her, and I held her in my arms, tearful with joy. But all of a sudden something vague and black seemed to come between us; a grotesque form, the form of a twelve-foot blue-skin, seized me with wire-like fingers and dragged me shrieking away. . . .

In alarm, I opened my eyes, aware once more of my cage, aware of the sensation of iron digging into my wrists and ankles.

ABOUT me was utter darkness, the darkness of the jungle night; and through the gloom the caged beasts wailed and screamed. But I was conscious only of that fearful binding sensation about my limbs. Bewildered, I sought to spring to my feet, and in horror found that I could not rise! My legs were lashed together, my arms strapped to my sides—I could only squirm and writhe worm-like upon the ground! From the depths of the terror that seized me, I uttered an agonized cry that rang out even above the groans and howlings of the beasts. But before that cry could be repeated, a suffocating wad of cloth was thrust into my mouth, and a diabolical cackle burst out from above. Then, as if in answer to the horrified question in my eyes, a brilliant white light sprang forth to my left; and, by its glare, I made out the staring faces of three blue-skins, one of whom brandished an electric lamp.

From their peculiar gestures, I judged them to be our visitors of the preceding afternoon. What insidious purpose might they have now? But even as I asked myself that question, the light flashed into darkness and I heard the rattling of the cage-bars and volley after volley of crackling laughter as my queer guests bade me farewell.

For a while that laughter continued, and I heard what seemed to be the sound of scuffling and a muffled shriek from the direction of Daolgi's cage. But I could not be sure that it was not the cry of some wounded beast; and, as I lay there squirming in the dark, the only recognizable sounds were the intermittent bellowings of some restless monster.

How long it was before the first gloom of morning I do not know, but certainly many hours crept by while I tossed and struggled open-eyed on the chilly stone, the cords and wires cutting into my flesh, my mind active in fathoming this fresh misfortune. Obviously, some strange new experience awaited me on the morrow—could it be that I was to be transported to some habitation still more foul? Or that I was to be punished for some offense against the Venerian laws? Or to be tortured for the amusement of the barbarians? Or displayed as a curiosity in some traveling circus? Or had my captors merely wearied of providing me with free lodgings? Did they consider that I would be more interesting dead than alive, and would make a valuable specimen stuffed in some museum?

These and other possibilities still more fantastic flashed before me in vivid colors—yet my keenest imagining was almost pleasant beside the approaching reality.

Not long after daybreak the new ordeal began. In the vagueness of the twilight I could distinguish a fettered form squirming in the cage to my right, and to the left a furry black mass enmeshed in ropes and wires. But before I had had time to observe these objects carefully, I found more direct cause for concern. There was a sudden clicking as the cage-bars to my rear were unlatched, and a volley of harsh and furtive whispers sent the cold waves running down my spine. But I strained my neck vainly for a glimpse of my new visitors, and it was only after several minutes that four or five of them came into view, exceptionally large blue-skins bearing a long object of black canvas—a stretcher such as we on earth use for carrying the dead. I must confess that the sight of this sepulchral object did not improve my spirits. Hence I squirmed and struggled with all my limited powers when eight blue-skins seized me, two by each leg and two by each arm, and, gasping and puffing, tried to lift me upon the stretcher. Had I had the free use of my muscles, not eight of these puny beings nor eighteen would have sufficed; even as it was, I made their task difficult, and several times succeeded in rolling off the stretcher just when they thought they had me securely in place. If they had not finally clasped a black rag over my eyes, blindfolding me and rendering me truly helpless, they might have wrestled with me for hours.

But once having robbed me of the use of my eyes, they had their way in all things. After a moment I felt myself being lifted and deposited on the yielding cloth—felt myself being jolted away, through what long and lightless alley I could not tell. And now, fresh terror seized me, a maddening terror, the terror of sheer impotence; and in every sound, in every odor, in every stray gust of the air I found new cause for apprehension. Soon, from the diminishing wailing and screeching of the caged brutes, I realized that we were leaving the menagerie; soon the rattlings and rumblings and thunderings from above and around me gave proof that we were in the heart of the city. And all the while we were attended by a constant prattling of conversation

and a crackling laughter that seemed to me as the derision of demons; all the while I was tormented with dread lest some evil thing strike from the dark, shattering me limb from limb, gouging out my eyes, hacking off my tongue, flaying me or burning me or maiming me for life.

At length we seemed to pass through a doorway, for the clamor of the street grew suddenly indistinct, and a half-suffocating, musty odor came to my nostrils. Then, before I had had time for reflection, there was a grating as of iron brakes, and a violent jerk as from an earthquake; and I found myself lunging downward at tremendous speed. In my horror and despair, I would have shrieked had I not been gagged; in that vivid, hideous instant it flashed upon me that I had been hurled over a precipice!

Then came another jolt, of a violence equal to the first. This time I was half dazed by the shock, for in my overheated imagination I had already pictured my collision with jagged rocks. It was not until I had again heard the guttural chuckles of the blue-skins and felt myself again being carried, that I recovered a certain assurance and could fearfully anticipate the next stage of the adventure.

IT was not long before that stage was in sight. Suddenly the guttural voices rose in pitch and excitement; there was a slamming as of a heavy door behind me, and I felt myself being deposited upon something hard and cold. Then, as the door slammed for a second time and the voices ceased, I made out an unexpected and yet not unfamiliar odor, an odor that brought me swift visions of the past, when as a student and later as an instructor, I had experimented in the chemical laboratories of Ulum University. Could it be, I asked myself, that I was again near a laboratory?

Even as I wondered, the question was answered. Some unseen hand snapped the black rag off my eyes and revealed my surroundings.

The first thing I noticed was a staring blue-tinged face, lined with white hairs and deeply furrowed—the face of one who filled me instantly with intense aversion. Beside this decrepit Venerian stood a younger companion, whom, from his peculiar gestures and mannerisms, I recognized to be one of our visitors of yesterday. Both individuals were clad in long black robes, and both wore rubber gloves and gauzy gray veils. By the garish yellow light of numerous walnut-sized electric bulbs I could make out the details of the room—details not calculated to reassure the timid! The walls were bare except for their lining of electric globes, but their glaring, tawny surface was mottled with sinister-looking red blots and patches; the cracked and bulging ceiling hung so low that I could have touched it while standing on the floor; and the three small circular windows were tightly shuttered and admitted not a gleam of light.

But the general features of the room were less striking than its specific contents. Directly ahead of me, gaping forbiddingly upon my face, stood a sort of gigantic medicine chest, whose glass doors displayed an astonishing array of bottled liquids and solids; while, embalmed in some of the receptacles, I recognized the embryos of small animals, and in others the remains of various monstrosities and freaks of nature.

But in one compartment of the great chest there were no bottles, but rather a perplexing array of steel implements—screws and spikes and wires and mallets; files and forceps and pliers and minute hammers; sharp-pointed scalpels and villainous-looking hatchets; long, curving knives, and saws, such as surgeons use in severing bone. It was this display that particularly interested and alarmed me; and I was not comforted when one of the blue-skins took out an especially murderous-looking knife and began sharpening it with a steady rasping. Nor did I find any consolation when, straining my neck toward a corner of the room, I beheld the bloody remains of some rabbit-like creature, sliced in half and disemboweled with evident scientific precision. Suddenly I was convinced that I was to be dissected if not vivisected!

This conviction grew more vivid when my white-haired persecutor approached me armed with a knife, and slowly and deliberately began to rip the clothing from about my neck. With all my feeble might I writhed and twisted in resistance; but almost the only result was to infuriate my captor. Finding that I did not submit docilely, he stamped and fumed about the room like a mad bull, uttering bovine bellows and brandishing his knife with such wicked frenzy that I expected at any moment to feel the cold blade. But apparently my enemy had other plans; at length he became more composed, seized a coil of wire from the medicine chest, and lashed me to the stone so tightly that the only part of me still able to move was my neck.

It was at this point that pandemonium broke out to my rear, and the shuffling of many feet advised me of the arrival of a brigade of blue-skins. Their particular purpose no longer interested me, for I was persuaded that I was soon to be beyond caring. Yet I did observe that stone platforms similar to my own were erected to my left; and that on one of these was deposited the long thin form of Daolgi Kar, his slender legs dangling helplessly over the edge; while on the other reposed a black furry mass, muzzled securely and tied with ropes and chains stout enough for a horse.

I thought it deplorable that, gagged and bound as I was, I could do nothing to console my fellow sufferers. Yet I was somewhat relieved when, catching Daolgi's eyes by chance, I found him still given to doing the unusual, found that he actually had the courage to wink at me, as though it were a comical thing to be vivisected! Insensibly I was cheered by his apparent levity, for I thought he had perhaps discovered some means of escape, and did not realize that (as he afterwards assured me) he was no less terrified than I.

After Daolgi and Yap Yap had been lashed to their slabs, three blue-skins commenced operations with business-like precision, each selecting one of us as his particular victim, and a fourth (the white-haired ogre) standing by and apparently giving instructions, much as when a professor directs the experiments of his class. In the beginning, they were comparatively gentle, but their gleaming array of knives gave no pleasant promise; and I was so fearfully nervous that even small actions loomed gigantic in my overwrought imagination. Thus, I was not really hurt when my tormentor pricked my skin with a scalpel and murmured in surprise at the sight of blood; yet so intense was my excitement that a sword could not have tortured me more. I believe that I should have fainted, had not some new spasm of pain revived me; but my persecutor was apparently resolved on prolonging the misery, and not only perforated my skin repeatedly, but pinched me, scratched me, burned me with hot wires and prodded me with small steel rods. And after each fresh barbarity, he would withdraw to observe results, and, student-like, would confide his conclusions to a notebook.

HOW long this process might have continued, and what agonies I might have endured, is a question I do not care to answer. Had it not been for a fortunate accident—or, rather, had it not been for Yap Yap—I should certainly have left my corpse on that mortuary slab. It seems that Yap Yap's experimenter, for reasons best known to himself, had removed his captive's muzzle and gag while leaving the beast still roped to the stone. And, as might have been predicted, Yap Yap

gave expression to his pent-up rage and terror in one long-drawn vehement burst of barking, which sounded and resounded from wall to wall in an ear-splitting din. Even the blue-skins seemed affected; and, armed though they were, they trembled and withdrew for consultation to the further end of the room.

Meanwhile Daolgi was twisting his head violently from side to side, motioning to his captors by the sole method left to him. It was several minutes before they noticed him, and even then they seemed to doubt the meaning of his queer antics; but eventually, after another of their guttural conferences, they seemed to reach some conclusion, and one of the blue-skins approached Daolgi hesitatingly, and deftly pulled the gag from his mouth.

Freed thus suddenly from the stifling obstruction, Daolgi gasped momentarily for breath. Then, realizing that he had no time to waste, he commanded "Be quiet!" to the vociferous Yap Yap, who was still snarling and growling. And, as if deprived of his tongue, Yap Yap became silent.

Obviously, the blue-skins were startled; for a moment they stared at us in gaping wonder. Yet, at an order from their leader, they returned with business-like precision to their knives and scalpels. And this time there would have been no escape, had not the poet displayed a rare presence of mind. "Wegi, wegi, wegi!" he cried, in shrill tones, remembering the native term for "terrible"; and the blue-skins, disconcerted at hearing themselves addressed in their own tongue, all paused to stare at him with the incredulous amazement of one who has been accosted in human language by a cat or a cow.

"Wegi, wegi, wegi!" repeated Daolgi, emphatically, lest there be any doubt about his words. And then, while the blue-skins still gaped speechlessly, he launched forth uncertainly upon several sentences in Venerian. I do not doubt but that he made gross grammatical errors and spoke with a raw earthly accent—but if we found a horse or monkey addressing us in the vernacular, would we pause to question its pronunciation? And so it was with the Venerians; so it was that minutes passed before their staring astonishment began to be dissipated and their paralyzed muscles were again in working order.

It was old White-Hair who first recovered his composure. Stepping toward us and waving his left hand imperiously, he rattled out a hasty order: whereat his associates melted into mobility, approached us with outstretched knives, and deftly attacked the ropes and wires.

In another moment we were again on our feet, somewhat unsteady, but once more free!

CHAPTER X

In the Depths

NO sooner had we regained our freedom than we were plunged into a new ordeal. One of the blue-skins approached us, and, apparently assuming that we were adepts in his language, poured forth a long and fluent stream of words. It was as if he had been addressing infants in the speech of college presidents; we could only gape, and strain our ears in vain. Yet, having completed this harangue, he waited expectantly for a reply; and when no reply came, one of his companions took his place, and addressed us in the same manner.

This time it was apparent that we should have to make some response. When the second speaker finished, accordingly, I undertook to display my knowledge of Venerian. Mentally I had marshalled some twelve or fifteen words, not because they were appropriate but because they were the only ones my vocabulary supplied; and these I pronounced with all the self-assurance I could command. The result, I fear, was akin to that produced by a trained parrot speaking a half-intelligible jargon—a low volley of derisive crackles greeted my efforts, and in the dark ferret eyes of the blue-skins I thought I could read laughter and scorn. Even Daolgi, I imagined, was looking at me just a bit contemptuously.

Then, for the second time the poet addressed the blue-skins, endeavoring to say that we were not animals but men. Doubtless because of his natural, linguistic talent, he succeeded better than I; the blue-skins did not laugh, but stared at us gravely, as if there might be something in what he had said.

After a moment's reflection, old White-Hair, apparently coming to some conclusion, whispered furtively to his fellows. And these responded by thrusting open a door to our rear and motioning us to follow them into the dark corridor. For a moment we hesitated; then, though not knowing what new treachery was in store, we saw that we had no course but to obey, and fearfully allowed ourselves to be led through the mazes of the dimly lighted hallway.

Apparently the corridor was endless in extent; for interminable distances it twisted and bent about innumerable hexagonal compartments. At measured intervals each gallery gave way to two others, which met it at an obtuse angle, and these in turn were similarly met by others still, and so on indefinitely, following the same beehive plan as the streets above.

This beehive quality was accentuated by the fact that numerous pedestrians (at least, the Venerian equivalent of pedestrians) kept whizzing and buzzing by on their queer roller-like foot contrivances. So rapidly did they glide past and so often did they approach a collision with us, that I was in constant fear for my life. I was thankful when our walk seemed to be drawing to a close—doubly thankful at the prospect of relief from the headache which I was beginning to feel in that hot, smoky and unspeakably vitiated atmosphere.

In a partially open hexagonal space, before a score of round steel columns each several feet thick, our guides at length beckoned us to halt. One of the blue-skins then pressed a little black button—and a hidden door in one of the columns sprang open, uncovering a metallic receptacle large enough to hold a man. Into this container the blue-skin thrust himself; and, after he had pulled a tiny lever, the door rattled to a close, there was a whirring as when a projectile shoots through the air—and the remaining blue-skins unconcernedly turned to other business.

A door at the base of the second column was now opened in similar fashion—and I felt a queer unsteadiness when I observed the guides motioning me to enter. But there was nothing to do but obey; and, biting my lips to keep back my fear, I stepped into the car and pulled the little lever.

With a violent jerk, I found myself launched downward. All about me there was a hoarse roaring and a hissing; my ears buzzed and ached from the sudden pressure; then, in an instant, there came a second jolt, and the steel door rattled open, leaving me free to enter another dimly lighted corridor, apparently the exact duplicate of the one I had just left.

An instant later several little doors in the steel columns snapped open, and from one of them Daolgi emerged, looking somewhat dazed, and from the others stepped our blue-skinned attendants. Again we proceeded through subterranean labyrinths, identical with those above, and populated similarly with buzzing, whirling, roller-clad swarms. Seemingly for miles we trudged through the long and feebly lighted galleries; then one of our guides motioned us to follow him through a little egg-shaped door, and we found ourselves

in a dim room filled with a multitude of indistinguishable, shadowy shapes.

At the threshold of this repellent place both Daolgi and I would have halted but for some prodding spear-like objects wielded by the blue-skins. But, having entered, we were distracted by a savage, familiar growl, and realized that Yap Yap, still unmuzzled, although tightly bound, had been tossed in after us. While we hastened to his aid, there came a salvo of derisive crackles from our rear, followed immediately by the clicking of a latch and the whirring of retreating foot-wheels—so that when we turned for a last despairing appeal to the blue-skins there were only blank walls before us, and we knew that we had exchanged our cage-bars for the darker walls of a dungon.

WHEN by degrees our eyes had accustomed themselves to the meager twilight of our new abode, we began slowly to make out its main features. It was a large, low-ceilinged room, hexagonal in shape, and marked at the extreme end by a small circular window traversed by black bars. Against the further walls many strange dark shapes were cowering, monstrous and fearful at first to our unaccustomed gaze, but resolving themselves at length into the forms of ordinary blue-skins. Probably we were as terrifying to them as they to us, for they huddled together panic-stricken; and whenever we made a motion, and in particular whenever Yap Yap made a motion, they would quiver visibly with fright.

But after a few minutes their alarm began to subside. Yap Yap's growling had ceased at Daolgi's peremptory command; and the dog lay huddled snugly in the arms of its master, who squatted cross-legged at my side on the sole visible "bench"—the sawdust-sprinkled iron floor. Our comrades in misery (for such I judged them to be) now began cautiously to approach, peering at us curiously with their dark little eyes, and displaying more of wonder than of hostility in the sidelong, furtive glances with which they regarded us.

Finding the blue-skins in a more composed state of mind, we made bold to rise and examine our new apartment more closely. There was really very little to see, since the room was without furniture, and the bare metallic walls offered no possibility of exit; but what interested me was the window (or, rather, the view from the window), for our sole outlet was upon a six-sided court whose sheer walls rose many hundred feet and out of sight.

Almost within touching distance of our window, stretched the flat iron floor of this pit; while above us, as far as we could see, rose row after how of little circular apertures, many of them dark and many illumined with a ghastly yellow light. No glimpse of the sky was to be seen; and, indeed, as we surmised, even the highest point within our observation was yards below the level of the ground, while above the surface for hundreds of yards the steel towers crowded out the day. Gazing out upon the iron walls in the grisly half-light and inhaling the stagnant basement air, we could almost have wished ourselves back in our cages.

Having inspected the physical features of our surroundings, we turned our attention to the blue-skins. Upon closer observation, we found that they differed from those we had already seen. About half of them, to judge from their unkempt and bedraggled appearance, were of the derelict class; they could not boast the regulation garments of close-fitting gray, black or brown; their clothes hung loosely in ripped and ragged strands of multi-colored patchwork; their faces were tanned and spotted, their hands gnarled and caked with dirt, their hair untended and their features wasted or contorted, withered, bloated, or hideously twisted, until they seemed the very caricatures of blue-skins.

In contrast with these unfortunates were the remaining prisoners. Of all whom we had observed in this topsy-turvy world, these were the noblest-looking, the most intelligent: on the average, they were two or three inches taller than the typical Venerian, their chests were somewhat less contracted, their heads somewhat larger, their skins somewhat less frigidly blue; while their eyes had nothing of the weasel-like expression common to their fellows, but were broad and open and humane, glittering with a beautiful dark fire and keen with a rare sagacity. Here, for the first time, we seemed to behold blue-skins with that transfiguring attribute known among men as a soul; here, for the first time, we seemed face to face with beings almost human in the capacity for thought and feeling, recorded upon their well-modelled and mobile faces. And while we could not but wonder how such superior creatures had come to be confined in so miserable a den, yet we were consoled to feel that we might consider them almost our fellows.

On the first day, of course, we did not advance far toward an acquaintanceship. Daolgi, indeed, did venture a few remarks; but his limited vocabulary permitted him to say nothing appropriate. When his hearers replied with a stream of words unintelligible to us both, the conversation struck a snag; and for the rest of that day we maintained the respectful distance of strangers who have not been introduced.

While we were wondering how best to resume negotiations, a distraction arrived in the shape of dinner. This meal, I must confess, constituted a problem to us, for it represented our first acquaintance with the Venerian bill of fare and Venerian culinary habits. Had we not exercised a fair degree of caution, it is possible that that day would have seen the last of us. We were not unjustifiably alarmed, indeed, when half a dozen blue-skins entered the room with enormous black trays, and presented all the prisoners, including ourselves, with rectangular iron platters laden with suspicious-looking viands. No knives, forks or spoons were visible; but on every platter reposed a peculiar elongated object, a sort of amber tube bulging in the center and open at both ends. At first I wondered whether this implement might not be some sort of a substitute for knives and forks; and I was examining it contemplatively when I observed that every blue-skin in the room had thrust one of the objects into his mouth, and was passing the base slowly over his food, apparently testing it somewhat as a blind man tests unfamiliar walls with his fingers.

Not unwilling to profit from their example, I stuck one end of the tube into my mouth, and placed the other end in contact with my food. Straightway a pungent, disagreeable flavor filled my mouth so overpoweringly, that I had to gasp and cough for relief. I could now surmise the nature of the tube—it was what might be called a taste-magnifier. I suspected that the Venerian sense of taste, in common with all the other senses, had become so blunted by an artificial environment, that it could no longer be trusted, but had to be aided scientifically before the blue-skins could determine the flavor, quality or state of preservation of their food.

HAVING discarded the "taste-magnifier", as the the pathetic contrivance of a decadent race, I began examining the food with only those tools that nature had granted me. First of all there was a pulpy, insipid pinkish mass, possibly digestible, although far from palatable, which I recognized as the blossom of a plant we had encountered in the forest; next there was a sticky bluish substance tasting like

corn-starch and fringed with masses of a yellowish lichen-like vegetable; then there were piles of what looked like stewed weeds, and strips of a fluffy saffron-colored bread; while in the center, dominating all with its steaming brown mass, was a loathsome concoction almost too horrible to describe. My countrymen of the Eight Hundredth Millennium would scarcely be able to credit such barbarity—charred and disfigured, and yet plainly recognizable for the grewsome thing it was, was half of the flayed and burnt carcass of some small beast, seasoned with salt and strong spices to conceal its nauseating stench!

Picking our way painstakingly amid these primitive foodstuffs, Daolgi and I satisfied our hunger from the vegetables and the sticky bluish substance. And what we could not eat (which included, of course, all of the disgusting fleshy dish) we tossed to the eager Yap Yap, whose sensibilities, apparently, were scarcely superior to those of the blue-skins.

Yet I did observe that one or two of the prisoners refused this carnivorous fare; though whether because of aversion to such a diet, or because this particular dish was poorly prepared, was more than I could say. I wished that I might question them about this and other details of Venerian life; and more than ever I lamented my ignorance of their language.

All the rest of that day Daolgi and I discussed ways and means of mastering the native speech. And late into the night, as we lay propped on our elbows on the hard floor, we debated and schemed in eager whispers. But at first no tenable plan occurred to us; and at times we were close to despair. It was Daolgi that finally solved the problem; and the credit must be given to Daolgi's poetic notebook, one of the few objects he had rescued upon our descent to this planet.

. . . Yap Yap gave expression to his pent-up rage and terror in one long-drawn vehement burst of barking, which sounded and resounded from wall to wall in an ear-splitting din . . .

Why not show the blue-skins the pages of this book, with the writing in an unfamiliar tongue? Would they not then comprehend that we were strangers from afar, ignorant of their language, yet desirous of learning it?

Early the following morning Daolgi approached one of the more intelligent-looking blue-skins, and flung open his notebook with an exclamation of "Sothon da" ("my own language"). The blue-skin glanced at the book in surprise; then, taking it into his hands, strained his eyes in the half-light as he peered at it with a cry of wonder; while, from the six corners of the room, his fellows gathered eagerly, glancing over his shoulders with the interest of inquisitive school-boys. At length he motioned us to sit by him at one end of the room; and, by dint of further gestures and a few opportunely chosen words, the poet made our purpose clear. Having grasped that we desired to learn his language, the blue-skin became our self-appointed tutor.

His method at first was simplicity itself. Tapping the floor lightly with his hand, he pronounced the word "Teptep", and Daolgi carefully recorded "Teptep" as Venerian for floor. Then he designated the window as "Glup", and Daolgi similarly noted the word.

Continuing he referred to the walls, the ceiling, his hands, his face, his fingers and other objects; and all these terms were duly registered in Daolgi's notebook. After a day or two, our instructor had exhausted the list of visible things and commenced to link words into sentences; and simultaneously, using pencil and paper lent him by Daolgi, he began writing the phrases he pronounced, proceeding always in topsy-turvy fashion from the bottom of the page upwards.

The Venerian language, we found, was exceedingly primitive in structure, and had an alphabet of more than four hundred characters—the equivalents of "thr," "bla," and "gra," for example, were single letters. Likewise, the grouping of the words followed a surprisingly crude principle, so that while "Sugu" was the term for good, "Sugu sugu" was the expression for very good, and "Sugu sugu sugu" meant extraordinarily good.

One thing which especially impressed me was the scarcity of verbs, and in particular the absence of the verb "to be"; the people ordinarily addressed each other by a succession of nouns and adjectives, and an average remark about the weather, for instance, would read as follows in literal translation, "Day fine, warm; sun high, hot, etc."; while, if a man wished to tell his neighbor that he had enjoyed his vacation among the snow-clad mountains, he would say, "I, high mountains, white snow, good time, etc." In such a direct and literal language, Daolgi assured me mournfully, the more delicate literary graces would be impossible; and he was prone to believe that the tumult and mad hurry of life had stamped all subtlety and beauty out of the medium of expression. This seemed to be a source for great dejection to him, for there obviously was no chance for poetry.

For my own part, I did not consider it unfortunate that the Venerian language was so simple. Not being a natural-born linguist, I had my difficulties with the speech; and I found it galling to see how rapidly the poet outdistanced me. When I was still struggling with a few elementary idioms, Daolgi was beginning to hold voluble conversations; and while I plodded like a schoolboy over my daily lessons, the poet had begun to give instructions in our own language. Only two weeks were required to give my companion a speaking vocabulary; yet more than a month had passed before I could open my mouth without drawing a quick response of amused crackles.

CHAPTER XI

Some Riddles Solved

WHILE studying the language of the blue-skins, we found the key to many other problems as well. Above all, of course, we were interested in that question which had agitated us even before we left the earth, and which had proved particularly baffling ever since the discovery of the rusted penknife and my observation of the mysterious caricatures. Had our fellow explorers reached this planet? And, if so, had they reached it alive? And were they still living? In my eagerness for information, I could hardly await the day when we might put these questions to the blue-skins.

My disappointment was all the greater, therefore, when I found that the blue-skins had little to tell us. To our surprise and dismay they would not believe that we had come from another world—nor that anyone had preceded us from another world. They were convinced that we had originated in some wild region of their own planet, since the savage inhabitants of their globe were numerous and mostly unknown; but they were not sure whether any creatures of our kind had ever been seen before. All they could say was that there had been rumors of the discovery of a strange new tribe in the continent of Guff, six thousand miles across the eastern ocean. This tribe, which was said to be composed of giants twelve feet tall, had white skins and blue eyes like monkeys and dwelt in the treetops; and they flew like birds about the forest, and were thought to have long horns like goats, and beards that reached to their ankles. They were, in fact, the lowest order of savages ever discovered, and many scientists believed them to be but an inferior species of ape. When they opened their mouths they made animal-like sounds quite without meaning, and they were considered to be almost, if not entirely, without intelligence; yet they were very terrible, and it was said that they would capture civilized men and tear them to death with their teeth. It was not known whether they would actually eat the victims; and, unfortunately, there had been little chance to determine the facts directly, since only one of them had ever been captured, and that one had escaped. Yet an expedition into their stronghold was now being planned, and it was expected that the entire tribe would be taken dead or alive.

Daolgi and I were much interested in these savages, and shuddered to think that some of our missing fellows might have fallen into their clutches or have been mistaken for them. But we dismissed the idea as improbable; and, seeing that the blue-skins had no more to tell us on the subject, we confined ourselves to questions they could be expected to answer.

But if we did not discover anything relating to the lost adventurers, at least we learned much concerning Venerian civilization, customs and institutions.

We found, to begin with, that not only were the natives barbarous, as we had surmised, but that they were groveling in an appalling savagery. It was but a moment, indeed, since their emergence from the prehistoric night, and their written annals covered a scant six or seven thousand years. As far back as they had any record, they had been divided into numerous tribes, races and nations; and their history was one long bloody tale of clash and conflict. Not unlike those barbarians that prowled on earth before the First Millennium, the Venerians had been absorbed in one continuous task of mutual destruction; and, far from being mitigated by social progress and the development of science, the struggle had waxed in rage and

intensity as the centuries went by. Whereas of old the contests had been confined to wandering clans with their hundreds or at most their thousands of members, of recent years they had involved whole nations with their hundreds or even their thousands of millions. Every conceivable engine of destruction, no matter how cruel, was employed without compunction against combatants and civilians alike (the distinction between the two was now recognized only in theory). And not only were whole cities exploded by well-timed blasts of aggression, but entire empires were scraped clean of life.

Remembering the battle-blackened desert we had crossed upon first reaching the planet, we were not surprised to learn that we dwelt in one of the most war-like countries of all—Wultho, the second largest in area and the third most populous of all the seventy-and-one nations of the world. But from what we heard of the other seventy, it did not seem to matter very much in what country we lived. All were equally backward, equally barbarous, equally repulsive to men who had known civilization; and warfare was general among them all, and social organization worse than primitive. Standardization was the law of the land, and all Venerians—both men and women—were compelled not only to look precisely like their fellows, but to act like them and to think like them; while to differ from the official opinion of the State or the accepted tenets of one's ancestors was to commit the unpardonable sin.

All honorable blue-skins, for example, were expected to devote themselves to private business and to the accumulation of profit; and so true was this that the Venerian word for "Genius" ("yolup") was the same as the word for "profiteer." But while a strict individualism was the rule in business, yet in all other affairs the State (or, rather, the clique of rich blue-skins who constituted the State) assumed dictatorial powers. They prescribed at what time every person should rise in the morning, and at what time he should retire at night; they directed at what hour in the evening each Municipal Electrician should pull the switch that illuminated his city; they regulated the speed of traffic, the food supply of the nation, the sanitation and the ventilation of cities; they appointed the judges and local officials, provided for popular amusement, popular education, popular military training (which, curiously enough, was regarded as a form of education). And, most important of all, they had the power of declaring war and peace, and hence of breeding that spirit of moral indignation, that suspicion and that jealousy, which were conventional preliminaries of the holocaust.

BUT what immediately interested us was not so much the national organization as the nature of the cities. We desired to know the meaning of the iron towers, massed fortress-like against the skies; the purpose of the steel platforms surrounding those towers; the object of the underground labyrinth through which we had passed; the reason for the breakneck speed at which the blue-skins scurried through the streets of the cities and the galleries beneath. And, in due time, we received an answer to all these questions. The Venerian towns, we were informed, had not always been as now; once a city had been no more than a straggling succession of low buildings. But that time had been more than five hundred years ago, before the Era of Great Population. It was now nearly six centuries since the substitution of mechanical for manual labor had revolutionized methods of production and made it possible for the population to treble and then treble again and then treble once more; and the present populace of eleven billions was largely clustered in the hundred cities of fifty millions or over. Not more than one person in five, consequently, was engaged in the basic processes of production, whether on farm or mine; and, of the city dwellers, the great majority were occupied either as laborers in manufacturing plants or as the servants or directors of commercial enterprises.

It was for commerce and industry, in fact, that the cities had been erected. The hexagonal towers were not, as I had imagined, the abode of the blue-skins; beneath the surface of the ground thirty successive tiers of corridors and six-sided apartments had been scooped out, and it was here that the blue-skins lived and here that many of them worked, straining their eyes in the perpetual electric glare and drawing their meager fund of air from the light-wells. Not even the well-to-do would have dreamed of dwelling in the external edifices, which had been reserved for business and manufacturing; and above the residences of all the Venerians the wheels of mills revolved and rattled, the smoke spread its black smudge skyward, while in the close atmosphere of innumerable offices the furtive-eyed magnates sat like spiders amid their bales and heaps of merchandise.

Business was likewise the keynote that explained the impetuous speed with which the blue-skins flitted about their city. They had a motto, as quaint as it was ridiculous, that "Time lost is money lost"; and in their eagerness not to lose money they had turned their cities into race-courses. So rapidly did the more business-like dart about that the streets could not contain them: hence the two tiers of platforms had been erected above the streets and about all the buildings, for the protection of ordinary pedestrians as well as for the convenience of fortune-hunters; and upon these platforms the Venerians were privileged to travel at any desired pace. Incidentally, any desired pace was attainable, for their velocity was produced by powerful storage batteries hidden in their clothing and connecting with the roller-like foot-gear; and, by means of a little concealed button, any individual could regulate his speed at will.

Yet the naïve explanation that "time lost is money lost" convinced neither Daolgi nor myself of the need for such lightning haste; and the poet maintained that the only plausible excuse was that life on this planet was very short. This, in fact, we found to be the case; not only were the years only equal to about seven and a half of our months, but thirty-five of those short years constituted the average life-span. A Venerian of forty was regarded much as we regard a centenarian, and there was no authentic record of any man ever having lived to fifty (although, to be sure, there were legends of patriarchs that had reached the fabulous age of sixty and even sixty-five). Twelve was generally recognized as the age of maturity, and fourteen as the suitable age for marriage; accordingly, the typical blue-skin of thirty might expect to be a grandparent. And, by the time he was thirty, the typical blue-skin would be superannuated; his skin would be coarse and wrinkled and of an accentuated blueness; his back would be bent, his hair whitening, his teeth falling out, his mind growing blunt; and there would be nothing left for him but a crutch to lean upon and a warm little underground nook where he might await the merciful Destroyer.

Strangely enough, things had not always been thus. There had been a time when a man could live to the ripe old age of forty in vigor of mind and body—a time when the average life had endured two score years. But that happy era, which had been more than five centuries ago, had been ended by the soot and

steel of industrialism. Subsequently, it is true, the advance of medical science had saved millions from death by disease and lengthened the careers of numberless weaklings; yet, for the last four centuries a continuous shortening of the life-span had been detected; and scientists and statisticians today were agreed that the deterioration was still unchecked, so that another five hundred years would probably bring the normal life-term down to two decades and a half.

But this was far from the worst. Simultaneous with the increasing death-rate had been the multiplication of diseases of the throat and lungs, which had exacted such a toll as to eliminate all racial strains not adapted to a subterranean existence. It had been determined that the chest of the average Venerian had contracted three and one-quarter inches since the dawn of industrialism, and that in about five per cent of all children born the lungs showed a tendency to be atrophied. There were even some who predicted that, before the passage of another century, all urban stocks would wither away and perish like basement-grown, yellowing plants.

Daolgi and I of course asked whether no efforts had been made to ameliorate city conditions. And, with ironic smiles, the blue-skins replied that countless efforts had been made, but that the would-be reformers had invariably ended (like themselves) in prison, if not in the morgue. It was a profound conviction of a majority of blue-skins (all the profounder, since they had never given it a thought) that existing conditions left nothing to be desired, and that it was impossible to imagine any improvement in the system of iron towers, beehive thoroughfares, and underground labyrinths. All that the average individual cared about —so barbarous were these people, and so lacking in refinement—was the accumulation of capital; and to the typical citizen the welfare of the world was of incomparably less importance than the increase of his private income.

THIS naturally brought us to the question of Venerian money. None of our blue-skin companions appeared to possess much of this commodity, which perhaps explained their presence in prison; but one of them, after delving about for a time in his pockets, did produce a single specimen for our inspection. At our first glance at the so-called coin we felt nothing but anger—what we beheld was a tiny sphere of plain yellow glass! It was only after the blue-skin's earnest protestations had been seconded by his fellows, only after they had argued and reasoned for an hour, that we were convinced of their seriousness. Truly, the Venerian money was not of gold or of silver—it was of that more valuable substance, colored glass!

While, as we had observed, ordinary transparent glass was common enough, yet colored glass was so rare and was manufactured with such difficulty, that it was the world-wide medium of exchange!

But there were many grades and varieties of colored glass. The yellow bit of money which our friend had shown us was the least valuable of all, and was worth but a penny or two; a blue glass marble of the same size was worth twelve of the yellows, a purple was worth twelve of the blues, and a lavender twelve of the purples, and so on until the highest values were reached in a pale green glass ("gulgul"), the unit of exchange, a single piece of which was considered the equivalent of more than a million of the little yellow spheres. To possess any green glass at all was to be fairly affluent, and to own as much as a hundred pieces was to be immensely wealthy!—while he who controlled a thousand of these little trinkets would be a lord of industry and commerce, an uncrowned potentate at whose dictates the tides of the world's life ebbed and flowed, at whose mere whim a million persons might prosper or starve, a countryside be fertilized or devastated, or war scatter terror throughout the planet.

Reflecting upon these facts, I regretted that my interplanetary baggage had not included a little green glass. But I held the idea in mind for future reference, and resolved to turn glass manufacturer if ever the opportunity appeared.

Meanwhile—since our present quarters offered no chance for such a scheme—I confined myself to considering some of the consequences of the Venerian monetary system. For one thing, since the value of a coin depended upon its color, the color-blind man would be at a grave disadvantage. In fact, as the blue-skins assured me, he was totally incapable of caring for himself; and, unless he had a guardian, he was certain to be short-changed and defrauded on every hand. For this reason, nearly every color-blind man on the planet was penniless; thousands of them were driven into lives of violence, vice and crime because of the impossibility of earning a living; and there were charitable institutions and asylums where the color-blind (or, rather, as the Venerians would say, the "money-blind") were cared for, much as on earth we care for the deaf, the dumb and the maimed.

Among the blue-skins sharing our quarters was one who confessed to the misfortune of being "money-blind." He did not acknowledge it willingly, but hung his head in shame, apparently not realizing that, to our unaccustomed gaze, he was among the noblest-looking and most prepossessing of all the Venerians. But, whether because of the scorn of others or his self-scorn, he spoke like one whose inferiority is obvious. He had been a disgrace to his friends, he stated, a sad disappointment to his parents, for never before had color-blindness been known in the family. Of course, every effort had been made to hush the scandal; but even in childhood his playmates had discovered his failing, and would habitually steal his blue coins and replace them with yellow. And when, at the age of eleven, he became incurably addicted to bad habits and was short-changed regularly, his outraged father had disowned the prodigal and cast him out of the house (or, rather, out of the Thirteenth Basement, the residence section of the wealthy). It was inevitable now that he should sink and sink; and after serving as butler in the Nineteenth Basement and janitor in the Twenty-seventh and being defrauded constantly, he had quit his work because he had never been paid for it and had finally been thrown into jail as shiftless and a vagabond.

Being sorry for this poor money-blind blue-skin, I sought to learn more about him; and, incidentally, asked his name. But, to my surprise, my friendly question was a source of embarrassment. He hung his head as if he would rather not reply, and at last, seeing that there was no escape, he blurted out, shamefacedly, "Large J, small b."

"Large J, small b!" I repeated, astonished. "You misunderstand me—I did not ask for your initials."

Gravely he assured me that he had stated his name in full.

"But surely, people here are not named by mere initials!" I exclaimed.

"Of course they are!" he returned, in surprise. "Otherwise, how would there be names enough to go around?"

At my request, he explained the native system. Each person had a name consisting of two letters—either large or small, depending upon his income and the income of his father. Thus, if a man's name were "Large A, Large B", the implication was that he was

wealthy and came of a wealthy family; hence that he was thoroughly respectable. If, on the other hand, his name were "small a, Large B", one might conclude that, whereas his father had been poor, he himself was rich: accordingly, that he was worthy of emulation as a "self-made man." "Large A, small b," on the contrary, was a name to be ashamed of, since it revealed one's poverty at the same time as it indicated the merit of one's parents; while "small a, small b," the commonest name of all, was the designation only of those insignificant creatures ("muggu", or "cattle") who had been born poor and remained in that unworthy condition for life.

I was interested to know whether the system of nomenclature had any practical effect upon the lives of the blue-skins; and I was surprised to learn that it made all the difference between master and slave. There were separate laws, separate rules of conduct, separate social and moral codes for "Large Letter Men" and for "small letter men"; and what was regarded as a grave offense in the latter would be condoned in the former, while privileges which were the daily enjoyment of the upper caste were forbidden to the lower. Thus, there was in each city a great municipal social-commercial club which provided entertainment for its members at public expense, elected all local officials, managed all local politics, and doled out "pardons" to convicted criminals; but membership in such clubs was limited to those whose names ended in large letters. Thus, likewise, if one desired an appointment as judge, ambassador, or educational official, or if one wished to advance some favorite bit of legislation or to crush some unprofitable bill, one not only had to have a "Large Letter Name," but had to be ready to sacrifice at least one piece of green glass. If, on the other hand, one were so unfortunate as to have a "small letter name," one's chief privilege would be to pay taxes, which were levied exclusively upon the poor, according to the maxim that, "From them that have not shall be taken"; while, if one happened to commit a crime, one's sentence would be in inverse proportion to the number of capital letters in one's name.

IT is needless to state, of course, that there were no "Large Letter Men" among our prison companions. A few, like our color-blind friend, boasted a large letter followed by a small; but the great majority belonged to the fourth and lowest order of blue-skins. Their offenses, indeed, were mostly of the sort that no one of higher social standing would have been likely to commit. One, for example, had been arrested for suggesting that there should be one law for all blue-skins since all were born equal; another had been condemned for publicly inquiring whether a city of fifty millions were not too large; a third had been convicted for proclaiming that population might be controlled more humanely by birth regulation than by warfare. And still another—the most singular of all, to our minds—was an astronomer who, in the face of all authority, had insisted that there was evidence of a higher form of life on the earth!

Among the other prisoners—if we leave out of account those who, like Daolgi and me, were obviously mere vagabonds—there were offenders of types almost impossible to imagine. What would our friends on earth think, for example, of the social reformer jailed for advocating fresh air for all? Or of the playwright who had violated the "pure laws", by mentioning that blue-skins were of two sexes? Or of the labor leader sentenced for the revolutionary doctrine that the workers should be organized? Or of the biologist suffering for his theory that the blue-skins were blood relatives of the other animals and had not been created by special dispensation of Providence?

As I came to know my companions and listened in astonishment to the tales they told, I felt almost fortunate and even a little flattered to have been sent to jail, for among those who shared these dark and shameful quarters were surely the most brilliant and original minds, the greatest geniuses of the planet!

CHAPTER XII

"Out of the Frying Pan"

IT will be best to pass briefly over the months that Daolgi and I spent in prison. Except for the opportunity to learn something of the Venerian language and institutions, that wretched period dragged uneventfully by, doubly agonizing because of the enforced inactivity when so much remained to be done. We had not yet lost sight of that mission which had brought us from the earth; and, even though we were beginning to doubt the suitability of Venus as an abode for civilized beings, we had not forgotten how thousands of our fellows had been straining their ears for a message that had not come, and might even now be listening in despair that was rooted in a forlorn hope. Could we escape from the blue-skins, we might somehow devise a means of communicating with the earth; but escape at present seemed remote as the earth itself, and we were tortured to think that all men might perish with their perishing world because of our imprisonment.

At first we had not even any idea how long that imprisonment was to endure; only upon learning the language were we acquainted with the details of our sentence. It appeared that the white-haired vivisector —who, as a "Large Letter Man," had the powers of a magistrate—had acted on the assumption that we were rogues from some unmapped land, and, pursuant to a statute that ordered the imprisonment of all vagabonds without a trial, had had us sent to prison for the lawful term of two years.

Needless to say, we did not relish the idea of two years in this dark and loathsome cellar. We were relieved, therefore, to learn that the law provided an alternative after the close of the first year: if we chose, we might leave our present quarters and go to work in some industrial establishment. Of course, we would still be prisoners, but no more so than the other laborers; and our services would bring us a nominal remuneration, the theory of the law being that this would compensate us for our loss in leaving the dungeon. Our fellow prisoners, however, seemed to believe that no remuneration would compensate us; and it was only our impatience and our craving for new experience that made us disregard their warning.

At the end of the first year we gravely bade adieu to "Large J, small b" and our other prison companions; and with sad and sympathetic looks they returned our farewells. For our own part, however, we were more cheerful than at any moment since arriving on the planet; and Daolgi predicted that at last we were on the road to success if not to actual escape. As for Yap Yap—who of late seemed to have lost all zest of life—he went wild with delight once the prison doors swung open. Like a creature demented, he leaped up and down, almost flinging himself into Daolgi's arms and then into mine, and barking so joyously and so excitedly that the jailers trembled and kept at a safe distance.

Yet there was little cause for rejoicing. It was not many minutes before I was wondering whether we would not have done better in jail. To begin with, we were taken to a great warehouse packed with innumerable drab brown garments, and there, for the

first time, were supplied with the native garb. True, this change was badly needed, for our old clothes were not only too conspicuous but were so torn and tattered as to be actually falling apart; yet even the largest of the Venerian suits were preposterously close-fitting, and Daolgi presented a sorry spectacle in a clinging costume that reminded me of tights, while my own appearance, I fear, was little more dignified.

As part of our new apparel, we were each equipped with a pair of foot-rollers, which we quickly learned to manage because of our childhood experience with roller skates. Propelling ourselves on these queer contrivances, we followed the jailers through numerous subterranean corridors; after which we were shot upward many stories to the level of the ground, and found ourselves in the most remarkable enclosure we had yet visited.

Apparently we stood in the interior of one of the great hexagonal steel buildings, for six sheer metallic walls, amply proportioned, shot up grimly about us and hedged us in completely. From all sides issued a deafening din, a metallic clanking and clattering, a strident shrieking and a hoarse continuous wailing, a droning as of motors and a hissing as of steam exhausts—so that, though Yap Yap attempted to bark his loudest, his voice was a scarcely perceptible muttering. Through the dense dust that hung about us like a fog and made us cough and gasp for breath, we had confused glimmers of great wheels and levers, of pistons and boilers and long rattling chains, of fast-revolving screws and of rods that bent and unbent like human limbs. All were operating with measured and clock-like precision; and not only did they occupy most of the visible floor space, but they spread far upward, wheel after rotating wheel, belt after coiling belt, until all were lost to view many yards above in the hazes somewhere beneath the ceiling.

As we stood marveling at this extraordinary mechanism, we observed a number of blue-skins standing on little elevated platforms all about us, operating the monster machine. And with what precise and mechanical gestures they labored! Each might himself have been a thing of steel and steam, to judge by the monotonous and perfectly regular fashion in which he pushed his left hand slowly forward, then drew it back against a steel rod then thrust it slowly forward, then drew it back again against the rod, and so on minute after minute, perhaps hour after hour, all the while moving no muscle of the leg or trunk nor any facial muscle, but displaying the mathematical evenness of manner and the impassivity of an automaton.

What was the aim of all this prodigious activity? We did not have to ask—one of the guards informed us voluntarily, as doubtless he was expected to inform all new employees. We were now in one of the centers of Venerian progress, one of the sources of national prosperity and pride, one of those institutions on which the community depended for culture, vitality and health—in short, a mill for producing sawdust!

ON demonstration of this fact, the guard led us to one side of the building, where assorted sawdust was heaped in enormous bins. In one container was piled a red sawdust that emitted a pungent acid odor; in another, a yellowish sawdust from recently demolished logs; in a third, a fantastic-looking purple sawdust that still reeked of the fresh dye; while green sawdust, blue sawdust, golden sawdust, white sawdust and black sawdust were stored in other receptacles.

While I was wondering about the purpose of these commodities, I chanced to observe a ten-foot advertising poster:

"HARDWOOD SAWDUST MILL: The world's greatest sawdust distributing plant. Have you ever stopped to think where all the sawdust comes from that you sprinkle about your floors—the sawdust that you trample upon, sit upon, lie upon and sleep upon? Thousands of men are laboring constantly to chop down the forests a hundred miles away; thousands of logs are floating down the Company's underground flume to its central factory; thousands of workers equipped with the most modern machinery are engaged in reducing the logs to sawdust; and other thousands are employed to distribute the product from sea to sea, to take orders to meet the international demand, and to see that there is no office however elegant, no basement however modest, that shall be without its daily sawdust. . . ."

"Sawdust-making is this country's leading industry," I overheard one of the Company's inspectors announcing to a visitor, while I stood glancing at the advertisement. "Last year forty-nine million four hundred thousand men were employed in the trade, and we produced six hundred and sixty-three million tons for export, not to speak of the still vaster quantities for domestic use!"

It was not long before we learned specifically how the sawdust was made. Attended by two or three guards, we were left waiting at a corner of the building where an enormous wheel, fifty feet in diameter and a hundred feet wide, revolved with a fearful screeching and grating. A dozen logs, each several yards in thickness, were firmly pressed against the rotating surface of this wheel by the teeth of gigantic, long-necked clamps; and the ends of the logs were obscured in a mist of flying particles. At the rate of perhaps an inch a second, the wood was being ground to fragments; with unbelievable rapidity, whole tree-trunks were crumbling from view. Even as we watched, there came the shrill blast of a steam exhaust, the great wheel groaned angrily and died to a halt; and simultaneously broad panels in the floor slid open, and, with a dull thudding and crashing, the heaped masses of fresh sawdust slid down into the dark. It was several minutes before the panels rattled to a close and the wheel groaned once more and renewed its labors; and in that time we had a chance to observe its grinding surface, which was brightly polished and yet presented a succession of sharp and jagged metallic edges reminding me of the magnified blade of a file.

Connecting with the wheel by means of great clanking chains was a series of smaller wheels, which themselves were joined by chains to wheels smaller still. It was at one of the latter chains that I was assigned to duty, while Yap Yap and Daolgi occupied themselves in ways that I shall later describe.

After the confinement of the cages and of the jail, I was prepared for any sort of work—but certainly I had not looked for an altogether dull and brainless routine. I, a trained scientist, was now reduced to the rank of a mere oiler of machinery!—and not even an oiler who could use his own mind, but one forced to operate blindly and automatically as the very machine he tended. Equipped with a foul-smelling oil-can more than half as tall as myself, I stood in line with a score of can-bearing blue-skins before a huge and slowly rotating chain that crept by like some sluggish antediluvian monster. And, like one of the great extinct serpents, it was multi-colored; every link had been painted a distinctive hue, green or orange, crimson or purple, lavender or violet. Yet the purpose of this coloration was not decorative but practical!

Each of the oilers was expected to attend to links of a particular tint, my own being a saffron yellow; and all I had to do was to stand statue-like until a saffron link clanked by, and then to lubricate it and remain

waiting until another link of the same hue rattled past.

Before half of my fourteen-hour shift had passed, I was so bored and weary that I heartily wished myself back in jail. The monstrous insipidity of my work appalled me; merely to relieve the monotony I would have undertaken the duties of my twenty fellow oilers in addition to my own. Indeed, it would easily have been possible to do so, since less than five per cent of our time was spent in effective labor; but when I ventured to mention the matter to the overseer I met with an indignant refusal. Such presumption, he assured me, was highly reprehensible!—if I did more than my share of work, my associates might be thrown out of employment, and that would be unfair, since the purpose of the social system was to make as much work as possible for every one.

Thenceforth I knew better than to complain. Mechanically I continued moiling at my saffron colored links, curbing my impatience by letting my thoughts travel to plans for the future, or by observing how sodden and almost inanimate my fellow workers seemed, how like a breed of imbeciles fitted for their tasks by their very imbecility! The minutes were slow, tantalizingly slow, and I felt that many days of such monotony would drive me insane. . . . But even the longest ordeal must end, and finally the fourteen weary eons did crawl past; finally, when I was ready to drop from an exhaustion more of the spirit than of the body, a siren screeched and the foreman notified us that our labors were over for the day.

As I followed the overseers out, I observed hundreds of blue-skins still at work, for the great sawdust industry knows no pause, and the mighty wheels revolve at all hours lest there be a sawdust famine.

But although the machines continued whirring and rumbling, dozens of laborers did leave work at the same time as I. Together we descended twenty-eight stories in the queer little electric shoots, then were all given lodgings for the night on great piles of coarse, undyed sawdust in a dank hexagonal basement. Incidentally, we were supplied with the day's food, which consisted of an ill-smelling greenish concoction of unknown content.

WHILE I was trying to decide whether to take my chances on this mysterious brew, the door slid open again, and Daolgi appeared at the point of a three-pronged spear, followed as ever by Yap Yap. It took the poet several minutes to regain his breath, Yap Yap meanwhile barking jubilantly at our reunion; and only after much questioning did I learn of the day's activities. Daolgi, it seems, had been assigned to work at a lever which his long arms adapted him admirably to operating; and meanwhile Yap Yap had settled himself comfortably to sleep on a pile of expensive vermilion sawdust and had stanchly resisted all efforts to drive him off. Not fifteen minutes after going to work, Daolgi had been aroused by a commotion from the direction of the sawdust heaps, and had observed two blue-skins rolling rapidly away with half a dozen inspectors in pursuit. Within a few seconds the fugitives had been captured; and, upon examination, their pockets were found to be full of the vermilion sawdust, which they had been stealing when frightened away by the vociferous Yap Yap! While the culprits were being led off to justice, several of the Company's officials had conferred, and, in recognition of Yap Yap's services, had decided to let him sleep daily on any sort of sawdust he chose, and also to keep him supplied with the choicest steaks and chops and other morsels favored by the canine palate.

The dog's master meanwhile had not fared so well. He had liked his work exactly as well as I liked mine, for it had been exactly as mechanical. At measured intervals, signified by a gleaming little red light, he had had to reach up and pull a long lever connecting with a motor which in turn connected with one of the twelve wheels that operated the great sawdust-grinder. Eleven other workers stationed throughout the factory similarly had control of eleven other motors, and upon them depended the operations of the entire establishment. Hence the post assigned Daolgi was a most important one.

The poet firmly maintained that for at least half an hour he had attended scrupulously to work, pulling the lever unfailingly whenever the red light gleamed. It was not to be expected, however, that either his patience or his diligence would be long-lived; and it was but natural that his thoughts should wander to subjects unconnected with levers and revolving wheels. He confessed to indulging in some fanciful speculations as to whether the Venerians most resembled bees or earthworms; and he admitted the possibility that he had occasionally failed to notice the gleaming red light. Upon cross-examination, he owned the possibility to be a probability, and the probability to be a certainty; but he was amused rather than crestfallen at the results. Doubtless he would have finished his fourteen-hour shift without noticing anything amiss; but in other sections of the mill, as he was emphatically informed some time later, experts were puzzling their heads and directors tearing their hair at the discovery that the day's sawdust production was three and a quarter per cent below normal. Where was the leak, the breakage? What part of the great mechanism had failed to function? To these questions they had no answer; and scores of mechanics were busy testing every screw and socket of the machinery, only to find everything in perfect working order. Then by chance an inspector paused before Daolgi's platform at the very instant when the red light flashed forth. But the lever might not have existed, for the poet stood there contemplatively, chin propped on palm, as though factory wheels had no existence for him. It was only upon the excited arrival of half a dozen foremen that he returned to earth (or, rather, to Venus); and even then he pleaded so persuasively (at least, according to his own testimony) that they were half convinced that he was not to blame. When at length the siren announced that it was quitting time and Daolgi was still fluently haranguing, the bewildered overseers settled the question by ordering Daolgi prodded into his night-cell and promising to have him demoted on the following day.

"After all," confided the poet, with a twinkle of the eye, after he had finished his recitation, "I produced something today which I value above any amount of mere pulverized wood."

And, snapping his notebook out of his pocket, he read:

"Out of this world of sawdust lives and men,
Out of this buzzing world of clever wheels,
Out of this world where heavy iron heels
  Trample the soul down in an iron pen,
  I rise and seek our own lost earth again,
For on its frozen plains no bondsman kneels,
And sometimes, in the starry night, one feels
  The sweeping of dark wings beyond his ken.
  "Here, where steel heavens in a sooty ring
Tomb-like enclose one, beauty gasps and dies
In smoke and dust that blind the heart and eyes.
  High on a snow-clad bough a bird may sing;
  But one would scarcely note the birth of spring
Where wheels and wires serve for sun and skies."

CHAPTER XIII

Escape

ON the following morning, true to their word, the overseers ordered Daolgi deposed. With smirks and jests implying that lever-pulling was too much for his intelligence, they assigned him to a task that any four-year-old might have performed. Thenceforth his duty was to hold in his hand a small time-marking object (the Venerian equivalent of a watch, though it looked more like a thermometer); and at intervals of about fifteen minutes he had to blow a shrill blast on a whistle that hung about his neck. Simple as it was, this operation was of vital importance, for it was the signal for the great sawdust-grinding wheel to halt temporarily and so avoid dangerous friction with the wood.

Lest it be wondered how Daolgi came to be entrusted with so responsible a post, it must be explained that the work could have been performed by a blind man, for whenever it was time for the whistle to be blown, the watch would emit a peculiar, loud rattling sound, somewhat as when our own clocks strike the hour. For this reason, the office was usually entrusted to what the Venerians call a "sogsug"—an untranslatable term signifying a thoroughbred incompetent.

Certainly, Daolgi did all in his power to justify that designation. It might be thought that he could not possibly have failed in his new task—but here again he was to accomplish the unexpected. Where the blue-skins miscalculated was in overlooking Daolgi's absent-mindedness; and their mistake was but natural, since absent-mindedness was unknown among the matter-of-fact natives. Personally, I had often had cause to deplore this quality in Daolgi; but now, to my surprise and doubtless to his as well I was actually to bless him for it!

For the first two hours of our second morning everything proceeded with methodical smoothness. Automatically I wielded my oil-can above the saffron links of a great chain; automatically that chain went clanking by, automatically the huge sawdust-wheel turned and stopped, automatically my fellow laborers performed their tasks. Automatically, that is, with one exception—before the morning was half over I was dimly aware that something was amiss. Just what was wrong I could not say; yet it did seem to me that the intervals between the blasts of the whistle were gradually growing longer, that the great pivotal wheel was operating at ever-lengthening periods; and I regretted more than ever that I was without means of measuring time.

Then suddenly occurred that event which for the moment obscured all other events and left me gaping in bewilderment. Above the groaning and thunder of the machines, there sounded a terrorized, hissing scream, "Huss! Huss!" ("Fire! Fire!") Simultaneously a bright yellow flare leapt up from the direction of the sawdust wheel, and a hot wind fanned my cheeks. Then there were other cries of "Huss! Huss!"; and before I quite knew what I was doing I found myself deserting my oil-can and being shoved along the aisle in a crowd of pushing, jostling blue-skins.

.."Huss! Huss! Huss!" they shrieked, and their dark little eyes shone with a wild light, and their little limbs shook and trembled in panic. "Huss! Huss! Huss!"—while the fire sprang higher and brighter, and crackled insanely like some ravenous monster, vaulting from sawdust heap to sawdust heap and lapping up spilled oil explosively. "Huss! Huss! Huss!"—and a sooty red light overspread the place; wave after wave of heat rolled over us, and the blisters burst forth on my skin. To right and left and all around us the flames had reached, smacking their orange lips in laughter, as if to broil us alive, as if to shrivel us like moths. Furiously I sought an exit, and found all exits closed; furiously the blue-skins sought an exit, and like trapped beasts they clutched at one another, trampled one another, jammed one another against wheels and walls, while one by one the great untended machines came thumping to a halt.

And ever the sparks flew higher, and the cinders more thickly, and the mad multitude howled in fiercer fright. "Huss! Huss! Huss!" they still hissed and wailed, in a battling frenzy. Then, when we seemed hopelessly caged, there came a slow creaking and rattling, as when a great gate moves on its hinges; and a trap-door opened in the floor almost beneath my feet, revealing stairways into unknown depths.

In the midst of a mob so dense that only my robust build and my height saved me from being crushed, I was forced down the stairs and into a long dark passageway. For hundreds of yards, how many hundreds I cannot guess, I was pushed and pummelled through this narrow corridor, having no notion where I was going; then, when at length another stairway presented itself, I mounted in the midst of an excited mob, passed through another gateway, and found myself—in a crowded street at the base of the hexagonal towers!

It was a minute before I had collected my wits and taken my bearings. As I stood there, gaping stupidly at the iron walls, I was startled by a vigorous slap on the back, and turned about angrily, to gaze into the face of Daolgi—and of Yap Yap, who blinked unconcernedly in his master's arms.

"Come," murmured the poet, with a quick but significant gesture. And, suddenly grasping his idea, I followed, as he slipped into the thick of the crowd, and, zigzagging native-fashion from right to left, rolled rapidly from thoroughfare to thoroughfare. Occasionally, during the course of the next few minutes, one of us glanced back to see that no one was in pursuit; but, in our native costume and at our headlong speed, we attracted no attention. Burdened as he was with the weight of Yap Yap, Daolgi did seem a little awkward about turning the corners, and narrowly averted several collisions; yet block after block, block after block, we rushed onward between the hexagonal buildings, until, by some freak of fortune perhaps due to our choice of the more crowded streets, the path of escape opened before us. Veering round one of the innumerable angles of the buildings, we found to our joy that we were at the end of the city, while before us, as far as the eye could see, a straight narrow road stretched across the flat fields.

ALONG this road in both directions scores of blue-skins were rolling at tremendous speed, much as wheeled vehicles roll along the roads of earth. Daolgi and I, of course, did not hesitate to follow their example, but set forth as though we had known this highway all our lives. And now, for the first time, we turned to each other with the exultant realization that we were free!

Discussing our good fortune as we sped side by side along that narrow red-paved thoroughfare, I insisted that Daolgi was the hero of the occasion. To be sure, he modestly disclaimed all credit; but I pointed out that it was his forgetfulness that had let the great sawdust wheel revolve overtime and hence become so heated by friction as to set fire to scraps of dry sawdust, which in turn had ignited the whole inflammable mass.

For two or three hours we hastened on without pausing, Daolgi and I taking turns in carrying Yap Yap. We were still traveling through level lands on an un-

bending road, and as we raced along we observed scores of blue-skins scattered among the yellowish brown fields, wielding peculiar spade-shaped instruments as though plowing by some antique method. But what interested us more than these creatures was the spectacle behind us, and every few minutes we would glance back to note how the iron mass of the city was dwindling to a low hilly formation, first monstrous and gray, then cloudy and remote as when we had originally beheld it, then blurred to a mere dot almost invisible against the hazes of the horizon.

It was when we were almost out of sight of the city that our difficulties re-commenced. The trouble, as usual, began with the poet, though I must admit that in this case he was not to blame. I was darting blithely along, congratulating myself anew upon my escape from the saffron links and the oil-can, when suddenly I observed that Daolgi was no longer at my side. Glancing back in alarm, I recognized his tall, lank form far down the road, but proceeding very slowly, as though in distress! Suddenly convinced that he was ill, I wheeled about and hastened back to him. But no! His smiling face assured me that he was well enough; the trouble was not with him but with his footgear, which had unaccountably ceased operating.

Gravely I inspected the refractory apparatus, and in a minute had discovered what was wrong. The mechanism itself was in good condition, but the battery was exhausted and had to be recharged. At present we were without facilities for re-charging it, and so the only course was for Daolgi to walk—or, if not to walk, at least to take advantage of the power of my own battery. After a hasty consultation, we contrived a sort of rope out of our excess clothing, and to this Daolgi clung, rolling a few feet behind me, while I towed him by means of my own still-active battery. I fear that this device would not have availed us long, since the strain, both upon the rope and upon my shoulders, was too great for endurance; but before we had gone a mile, my own battery solved the problem by sputtering out, and Daolgi and I found ourselves reduced to the rank of pedestrians.

Obviously, we would not be safe in that rôle by day. And so we withdrew to the shelter of a clump of bamboo-like reeds by the side of a sluggish little stream, and there awaited the arrival of evening. Meanwhile we had sufficient to do—first, to remove the rollers from our shoes, and so equip ourselves for walking; next, to satisfy our hunger by means of a pink fungoid growth which throve at the base of the reeds; and, finally, to discuss plans and prospects for the future.

Both Daolgi and I were inclined to be optimistic. Now that we had escaped from the blue-skins, who knew but that our expedition to Venus would still bear fruit? Who knew but that we should still meet our fellow explorers, who—as we had had cause to suspect—might be surviving somewhere on this planet, even though many thousands of miles away?

But temporarily we had to drive them out of mind; we had to devote ourselves to objects more nearly within our grasp. First of all, there was the long-mooted plan for the construction of a radio; secondly, my vaguely conceived scheme for the manufacture of green glass. While the latter idea still seemed valuable, the former had a more direct appeal; and it was to this project, accordingly, that we devoted ourselves.

As a feasible compromise, I suggested that we attempt to erect a wireless telegraph, which would be easier to contrive than a speaking apparatus and yet might serve almost as well. Given a few wires and a source of electrical power, we could at least make some tests that would put us on the way to success, even if we were not actually able to communicate with the earth.

But how acquire the necessary equipment? Daolgi did not believe that we could acquire it at all; and we had a long and bitter debate before I hit upon an idea which was so simple and yet so practicable that it fairly took my breath away. The Venerian foot-rollers, as we had observed, were constructed of steel and were operated by means of powerful electric storage batteries and connecting wires—accordingly, three or four such foot rollers, with well-charged batteries, would supply us with all the needed materials!

It was with eager enthusiasm that I confided this idea to Daolgi. But Daolgi, with his customary indifference, did not seem to think it worth considering. And how are we to get enough foot-rollers?" he questioned, with mild sarcasm. "Perhaps you expect to go back to our friends in the sawdust mill and ask for them."

"No, I'll not ask for them," I declared, a bold plan coming suddenly to me. "I'll take them!"

"Take them?" laughed Daolgi, as if relishing a rare joke. "From whom?"

"What does it matter?" I flashed back. "From anyone that happens along!"

"You mean, you'll turn highway robber?" Daolgi was peering at me with such polite irony that I would have loved to thrash the insolence out of him.

But, with an effort, I choked back my feelings. "Yes, I'll turn highway robber!" I affirmed. "And you'll turn robber with me!"

"Me? Me turn robber?" roared Daolgi. "Why, no poet in history has ever succeeded as a highwayman!"

"Then you'll be the first!" I insisted. And, without further dalliance, I explained my plan of attack. He and I should both arm ourselves with clubs, and, stationing ourselves at night by the side of the road, should accost stray passers-by and deprive them of their footgear, though of course leaving them otherwise unmolested. Owing to our relatively great size and strength, we should have no difficulty in taking the desired booty.

"But what moral justification?" Daolgi started to expostulate.

"None at all!" I snapped. "There wasn't any moral justification for coming to this world in the first place!"

AFTER another hour of debate and repartee, the matter was settled. But I suspected that, deep down in his heart, Daolgi objected less strenuously than he pretended. In fact, he seemed to derive actual enjoyment from the adventure when, just after sundown, he took his place beside me in a cluster of dense bushes a few yards back of the road. He even exhibited a most unpoetic gusto in swinging the hickory-like dead bough that served him for a club; and, from the eagerness with which he awaited the first victim, I was not sure but that some remote ancestor of his had been a swashbuckling pirate, or, at the least, a successful hold-up man.

But his boldness vanished upon the appearance of our first victim. Far down the long dark road we could see an occasional glittering light, which swept toward us at tremendous speed and darted past like a shooting star—some belated traveler on foot-rollers, guiding himself by means of an electric head-lamp. At least ten or twelve of these blue-skins came whirling past before I could persuade Daolgi to join me in the attack; and, even so, he joined at first merely as an onlooker—which may explain the failure of our initial attempt.

Finally, with more of an effort at courage than I cared to admit, I flung myself into the road before an

approaching traveler, calling out, in the native tongue, "Stop! Stop!"

The traveler clattered to a halt, staring at us with frightened little black eyes, then whirled about, and, before we could do anything to stop him, went flashing away toward his starting point.

And, at the same time, sharpening the pangs of failure, there came a burst of laughter from Daolgi.

"Can't you take anything seriously?" I demanded, enraged. "Not even highway robbery?"

But before Daolgi had had time to reply, we observed another gleaming light far down the road. "This time we must succeed!" I cried. And I ordered Daolgi to station himself a hundred yards or so to my rear, so that the victim might be trapped between the two of us.

The plan, unfortunately, worked only too well. A moment later a terrified blue-skin trembled before us, Daolgi brandishing a club behind him and I brandishing a club in front. But, having captured him, we scarcely knew what to do. "Your shoes or your life!" I demanded, at the top of my voice; whereat the blue-skin, perhaps thinking that he had to deal with lunatics, emitted a crackling laugh in spite of his alarm. Then, with amazing suddenness, he started in Daolgi's direction.

The poet was taken completely by surprise. One glance at his approaching assailant, and he dropped his club and fled!

After this incident, I began to question our chances of success. Whatever Daolgi's literary abilities, he obviously had no genius for highway robbery; I was convinced that I must commit the hold-up unaided or not at all. Yet, after Daolgi had returned somewhat sheepishly from his hiding-place in the bushes, he pleaded to be given another chance; and, for lack of a better partner, I agreed to let him assist in our third and last attempt.

This time we had over an hour to wait. It was as if the warning of our presence had been

Equipped with a foul-smelling oil-can more than half as tall as myself, I stood in line with a score of can-bearing blue-skins before a huge and slowly rotating chain that crept by like some sluggish antediluvian monster.

spread abroad; the road was deserted, and I felt more than one premonitory qualm as I lay waiting in that still, silent thicket, gazing out into the starlit, ghostly fields. Gladly I would have abandoned the undertaking—gladly, except that I could not admit my fears to Daolgi.

We were beginning to think that we should have to wait until morning, when a faint twinkling far down the road roused us to alertness. Gradually that twinkling deepened into a glitter, the glitter into a bright sparkling, and the sparkling into a glare—then, as the droning of motors came dully to our ears, we sprang into the road, swinging our clubs, and crying, ferociously, "Your shoes or your life!"

Our intended victim came to a halt; we could see his dark eyes burning wickedly. Simultaneously, we became aware of other eyes staring at us from obscure, shadowy forms.

"In the name of the law," one of the men addressed us in shrill, peremptory tones. "In the name of the law, we arrest you!"

Already I had visions of dungeons and sawdust mills, when Daolgi, with surprising presence of mind, came to the rescue.

"Yap Yap, here Yap Yap, go for them!" he shouted. Instantly the voices of the blue-skins were drowned in a tempest of howls and barking; and a dim, lithe shape, doubly large and dread in the darkness, hurled itself toward the newcomers.

In the ensuing confusion, half of the blue-skins no doubt escaped—I have never been able to estimate how many whirled past me in panic-stricken flight. But five or six, blocked on one side by my swinging club and on the other by the snarling Yap Yap, flung themselves to the ground, begging for mercy.

To these I turned my exclusive attention. After cowing them with the threat of instant execution, I promised them their lives if they would present me immediately with their footgear and connecting wires and batteries. Even in their terror they expressed amazement at the request, but they made haste to comply; and while I swung my club combatively and Yap Yap stood growling menace, at a safe distance, Daolgi hastily collected their surplus apparel. Along with their foot-rollers we took some copper caps proving them to be constables and agents of the peace; and, at the same time, we relieved them of the long, plier-like tools which they used in making arrests.

So heavy was our loot that Daolgi staggered away with it as though scarcely able to walk. But before I could rejoin him and share the burden, I had to watch the blue-skins go hobbling disconsolately down the road, like kings divested of royalty.

CHAPTER XIV

Dots and Dashes

AFTER Daolgi and I had dragged our plunder to the safety of a thicket and there awaited the arrival of morning, we found ourselves fortunate beyond all expectations. The stolen wires, the half-dozen batteries and the various scraps of metal would give us all the materials necessary for a wireless telegraph; and my penknife and the pliers would provide us with crude, although adequate tools.

Shortly after daybreak, accordingly, I began activities. Having selected a little clearing in the grove as my workshop, I commissioned Daolgi and Yap Yap to act as detectives to give warning of intruders, and also as foragers to gather the day's food supply. Although I could not suppress an uncanny fear that we were being sought for highway robbery and might be surrounded at any moment, I worked steadily and to good effect. It was but the task of a morning to connect the various batteries and to splice together the numerous short wires. By the middle of the afternoon I had completed most of the equipment and was busy in the treetops installing the aerial. In this work Daolgi attempted to assist me, though the most he accomplished was to get the wires tangled. But, even with this handicap, it was not yet evening when I had grounded one of the wires, and my labors were completed!

Apparently we had a wireless telegraph in good operating condition. Apparently we could send messages, if not to the earth, at least far enough to give hope of sending messages to the earth! In my enthusiasm, I seized Daolgi's hand and shook it convulsively. For the first time we had reason to believe that our expedition to Venus was not altogether a failure!

And now to test the new device! As eagerly as a child trying out a plaything, I applied the electrical power, sending off a succession of messages addressed to my fellow men. Not that I actually hoped to be noticed on earth; I was acting merely in a spirit of experimentation. And in the same experimental spirit I awaited the return messages. I could not, of course, expect any response from this planet, for, so far as I had been able to discover, wireless telegraphy was unknown to the Venerians. I did have vague hopes, though, of receiving a message from the earth.

Meanwhile, Daolgi lolled languidly on the ground, smiling a skeptical smile, as I put the instrument into operation. "You don't actually expect results, do you?" he seemed to be asking, in that irritating manner he was learning to assume toward my scientific experiments. And I was mentally framing some bitter remark, when my attention was diverted by more important things.

Suddenly, from the receiving device of the wireless, there flashed a succession of sparks—rapid blue sparks that sputtered in a continuous stream!

Could it be a reply from the earth? Or had the blue-skins caught and answered my signals? . . . Excitedly I seized pencil and paper and began recording the message. "Dash, dot, dash . . . dash, dash, dash, dot . . . dot, dot, dash, dash . . . dot, dash, dot, dash, dot, dash . . ." Not a flash, not a flicker did I miss in my eagerness. But only after the sparks had ceased did I attempt to interpret the communication.

The first results, however, were unsatisfactory. Perhaps I had let my imagination run away with me. Or perhaps my desires had obscured my sense of scientific probability. It was not really to be expected that the message would make sense according to the earthly code; yet I experienced one of the keenest disappointments of my life when I glanced over the dots and dashes and found them unintelligible. By no effort could I give them meaning—they were like characters in a language to which I had not the key!

Speculating on the source of the message, I suggested that possibly it had originated with some advanced Venerian race of which we had not yet heard. Daolgi, growing wildly fantastic, opined that it came from another planet—certainly not from the earth, but perhaps from Mercury or Mars. And when I chided him upon the untenability of this view, he defended himself with a long argument, which no doubt would have become hot and bitter had not a fresh series of sparks forced my attention back to the wireless.

Although twilight was now upon us, I managed, by straining my eyes, to take down the message. . . . In the deepening dusk, and at the cost of further eyestrain, I examined it in mystified silence. Most of the

words seemed meaningless; yet the first word, possibly due to a coincidence, appeared to make sense according to the earthly code!

I was about to call Daolgi's attention to this fact, when I was startled by a low rustling in the bushes to my rear. In quick alarm, the poet and I stood staring motionless toward the source of the noise—was it but some harmless wild thing? As we remained listening, there came a faint crackling, as of twigs trodden underfoot; then, from the shadowy depths of the grove, a vague hissing—the speech of the blue-skins!

We did not wait to hear more. Of one accord, we raced toward the thickets. And well that we made haste! As we sprinted off, a chorus of fierce shouts came to our ears; and out of the dense brush dashed a score of blue-skins, brandishing weapons that gleamed evilly in the pale twilight. We had no chance for close observation; but as we disappeared among the bushes, we caught sight of two blue-skins demolishing the wireless device, while the others sped toward us as swiftly a their thin legs would permit.

Then, if ever, we were thankful to possess the superior physiques of earth-men. With our lithe and muscular frames, we outdistanced our pursuers as easily as a race-horse outdistances a man. As a precaution, we kept on at a moderate pace for a mile or two; after which, trusting to the shielding darkness, we flung ourselves down in a comfortable reedy nook at the brink of the stream that had sheltered us the day before.

ONCE more, as we sat there under the black drooping limbs of a willow-like tree, we were forced to take stock of our position. Obviously, we had gained nothing from the wireless—nothing, except new riddles to solve. And, quite as obviously, the erection of another wireless would gain us nothing—nothing, except the danger of recapture. It was evident that the country was being scoured for us; that the further we were from this spot the safer we would be. But where should we go? Daolgi, as ever, was content to wander aimlessly; but I, with a scientist's sense of logic, insisted upon some definite goal. Why not keep in mind my project for the manufacture of green glass? After half an hour's argument, during which I described how, by means of my scientific knowledge, I might make "gulgul" in unlimited quantities and rise to the mastery of the world, I convinced the poet of the feasibility of this scheme. The best course, I concluded, would be to seek the seashore or the bank of some sandy stream, and there to erect a furnace to melt the sand along with various essential ores and oxides. Any one of several common chemicals might produce the desired green coloration, and thereby automatically make us the wealthiest men on the planet.

But how to find the seashore? That desirable region might be five miles away, or five hundred, for the geography of the planet was still mostly a mystery to us; and, even though the salt water were near, we might go seeking it in the wrong direction. It was at this point that Daolgi came to the rescue. With a display of common sense, that I thought remarkable in a poet, he suggested that the obvious plan would be to follow the course of the streams, which doubtless would travel seaward with as sure an instinct on Venus as on the earth. There was no disputing the logic of this contention; and for the first time since reaching the planet Daolgi and I were fully in accord as to our route.

With the arrival of evening, accordingly, we set out beside the narrow stream whose banks had sheltered us during the day. Progress was not easy, for the country was unknown, and we had no light except for the feeble illumination of the moonless skies. Even so, however, we might have advanced much more rapidly had not Daolgi let his imagination run away with him, and constantly conjured up huge snakes, panthers, and man-eating dinosaurs out of what, upon investigation, proved to be but stumps or many-branching shrubs. Worse still, however, were the real obstacles—barbed wire entanglements that enclosed the fields at measured intervals, and which could be passed only at the cost of much damage to our hands and clothing. In view of these barbarous encumbrances and Daolgi's half-barbarous fancies, we covered not more than half a dozen miles that night; yet, when morning began to flush the eastern skies we were so weary that we flung ourselves with sighs of relief upon a bed of rushes near the rivulet's brink, and were almost instantly asleep.

It must have been five or six hours later when I awoke, for daylight was drenching us in unbearable brightness and the sun hung almost directly above. Without delay I aroused Daolgi, who was slumbering sonorously at my side, and, profiting from last night's experience, I suggested that we travel on by day. He made some protests as to the danger of being observed and recaptured; but I pointed out that we would be secluded by the groves that lined the water's edge, and that our greatest difficulty would be with the barbed-wire fences.

To this argument Daolgi finally capitulated, and, after an improvized breakfast of roots and berries, we hastened on at an encouraging speed. Fortunately, the region seemed almost uninhabited—though at rare intervals, upon observing in the distance a low hexagonal iron building or farmhouse, we took care to keep particularly well concealed. Only twice that day did we pause—and both times with important results. The first occasion was when I observed a peculiar black earthy formation recognizable as an oxide of copper which, as I well knew, may be used to give a pale green coloration to glass. Although Daolgi stood by grumbling impatiently, I could not refrain from gathering a small supply of this useful substance. Somehow, I was persuaded that the opportunity for using it was not far off.

On the second occasion, our halt was quite unpremeditated. Issuing suddenly from amid the dense brush in the heart of the wilderness, we found ourselves unexpectedly face to face with a blue-skin. Our first impulse was to flee, but something in the aspect of the man restrained us. He was white-headed and grizzled and apparently incapable of harm; his face, larger and lighter in hue than that of the typical Venerian, wore a thoughtful, almost scholarly expression; while his occupation set him off strikingly from his fellows. Crouching meditatively on the ground, he was scrutinizing with gleaming lenses the antics of some ant-like insect; and books and papers, sketches and manuscripts were scattered around him in confusion.

Upon seeing us he leapt up embarrassed, almost as though detected in a crime. "I was just carrying on some observations," he explained, hurriedly, when he had recovered from his first startled surprise. But for one whose business was to observe, he seemed remarkably slow about noting anything unusual in our appearance. "Strangers in these parts, I presume?" he inquired, mildly; and we admitted the correctness of this conjecture, though we did not say quite how strange we were.

We were just about to continue our journey (for we were a little suspicious of all blue-skins, even of the most friendly) when he called us back with an eager question.

"By the way," he inquired, with a perplexed gesture toward Yap Yap, "would you find informing me what variety of vertebrate we have here? Never in all my studies of the mammalia have I seen anything to compare with it. Is it perhaps some species of tropical reptile?"

The blue-skin seemed disappointed to learn that Yap Yap was not a tropical reptile. "Now down on the island of Zab—you know, in the Descian Ocean," he pursued, "they have a lizard that looks just about as strange as this pet of yours. Makes an excellent playmate for the children. Well, I was just wondering whether you mightn't have imported him from Zab—or possibly one of the other North Sea Islands?"

RELUCTANTLY I admitted that I had not imported Yap Yap from the North Sea Islands.

"Now that's queer," returned the Venerian, reflectively. "I could almost have sworn to it. But perhaps you're from the North Seas yourself."

"No, not exactly," I admitted.

"Well, of course, that's no affair of mine," the blue-skin declared, with a courteous wave of the hand. "I must admit, though, I'm more concerned about that freakish quadruped of yours. My field, you see, is zoology, not anthropology."

"I suppose you're a professor in some university?" put in Daolgi, who had to make himself heard.

'No, no." The old man shook his head sadly. "It's been my lifelong ambition to be a professor. But I have to make a living. And so I devote myself to science only in my spare hours. At night I work."

"What do you work at?" asked the curious Daolgi.

"Oh, no one thing in particular. That would get too monotonous. I've done many things in my time."

"What, for example?" the poet persisted.

"Oh, well, let's see. I've had so many jobs, it's hard to remember them all. I've been assistant in a museum—salesman of foot rollers—municipal lamplighter—manufacturer of true animal stories for the papers—operator in a telegraph office——"

"Operator in a telegraph office?" I interrupted, excitedly. "Operator in a telegraph office, did you say?"

"Why, yes," he affirmed, surprised at my eagerness. "I was telegraph operator for several years in my younger days. Anything so remarkable about that?"

"Oh, no," I said. "No, not at all." But I had conceived a brilliant idea. "Then perhaps you know the telegraph codes?"

"Of course." The blue-skin wore an injured expression. "What do I get my daily yellow glass for?"

"But you know them thoroughly?" I demanded. "All the codes——"

"Naturally. Naturally. We had to know all the codes. Had to interpret messages from everywhere."

This was even better than I had hoped to hear.

"Splendid!" I cried, drawing a sheet of scribbled paper out of my pocket. "Splendid! You're the very man I've been looking for! Can you tell me what this means?" And I thrust into his hands the still undeciphered wireless message.

The blue-skin regarded the dots and dashes with a puzzled air. His eyes narrowed; and undisguised amazement shone in his face. "Where did you get this?" he demanded, with every sign of excitement.

"Why, anything odd about it?" I inquired.

"Odd? It's extraordinary!—most extraordinary! You didn't get that in this country, did you?"

"Why not in this country?" I flung back, no less puzzled than he.

"Because it's in a foreign language, a foreign code—the code of Xerion, on the continent of Guff! It's very rarely that we see that code here!"

"But what does the message say?" I demanded, unable to suppress my eagerness.

"That I can't quite make out," mumbled the blue-skin, again straining his eyes over the paper. "Some of the words are clear enough, and others again I can't understand. Too bad—I'll have to skip whole sentences, I'm afraid." There came a momentary hesitation, before he continued, "Well, anyway, this much I can be sure of: 'Quick, bring help . . . they are hunting us . . . cannot hold out much longer. . . .' Now then, here's a word I can't get any meaning out of at all." And, with difficulty, he read, in our earthly language, the word "Farewell!"

By this time Daolgi and I were so excited that we could scarcely bear to wait. "Go on! Go on!" we urged, betraying such impatience that the blue-skin paused to stare at us in astonishment, as though we were more in need of interpretation than the wireless report.

"I can't make out the rest at all," he confessed, as he puzzled over the dots and dashes. "No, I can't make it out at all. Maybe it's in some language I don't know. Or maybe you took it down all wrong."

"Try again—please try!" I entreated. But though our new-found friend did his best, he was unable to translate another word.

" At least, maybe you can tell us where the message comes from," I pleaded, as a last resource.

"Well, as I said, it seems to be from the country of Xerion, on the continent of Guff. That's, roughly speaking, about seven to nine thousand miles away."

"How do you get there?" put in Daolgi, abruptly.

"Get there?" The blue-skin could not repress his astonishment. "What do you want to get there for? It's the most uncivilized spot on Venus! Populated by a horde of gray-skinned savages. No blue man could live there half a year!"

"Just the same, how could we reach the place?" Daolgi persisted.

'Why, have you never studied geography?" exclaimed the blue-skin, his amazement growing by leaps and bounds. "The public schools are getting to be frightfully backward nowadays! When I was in school every child had to learn by heart the distance, elevation, boundaries and principal drawbacks of every country on Venus."

"Oh, of course, I've learned all that long ago," fabricated Daolgi. "Only I have a poor memory. I've forgotten all that I ever learned."

"So have most of us," declared the blue-skin sympathetically. "Still, you can hardly have forgotten how to reach Xerion. First, you know, one must cross the Hurricane Ocean, then travel over Dead Done Desert, then pass over the Iceberg Mountains and beyond across the boundary into Malaria Valley and the Desolate Woods. Why, haven't you been reading about that every day in the papers of late? Haven't you noticed about those explorers going over there to get specimens of the milk-faced giants and bring them back stuffed for our museums?"

Still deeply mystified, we admitted that, of course, we had read the accounts with interest. After which, seeing that there was no further information to be gained, we thanked the blue-skin and hastened on our way.

But never since reaching the planet had we been more completely bewildered. As a thousand times before, we asked ourselves whether the lost explorers were still alive. And, if so, were they on the continent of Guff? And were they in imminent peril? After all, it seemed unlikely that the messages were in any way connected with them, for the words had been in a Venerian code, and—with but two doubtful exceptions—in a Venerian language. Yet those two exceptions kept recurring and recurring to us, and we could not suppress

the feeling that they were not to be explained by mere coincidence; that somehow our fellows were in need of aid. The knowledge of our own helplessness weighed heavily upon us; and we were eager as never before for the speedy manufacture of green glass, since without it we saw no hope of reaching or succoring our kindred.

But our gloomy reflections did not delay our progress across the green, deserted fields. And it was not long before a series of exciting events made us temporarily forget the messages and even the lost men and women and our plans.

ABOUT an hour before sundown we came to the end of the little rivulet. Without warning it emptied its sluggish waters into a broader stream that flowed steadily although slowly along an even, almost unbending channel.

There was clearly nothing for us two to do except to follow the latter watercourse; but, as it was evidently navigable, we began to long for a raft or small boat. But no sign of any craft was visible—and, assuming that our wish was futile, we started to walk rapidly along the river's bank.

Then, as if our unspoken prayer had been heard and granted, we came into possession of the very thing we desired.

As yet it was not quite twilight when a rhythmic splashing from upstream sent us scurrying into the bushes; and, as we lay fearfully in ambush, the guttural sound of voices and the crackling laughter of the blue-skins was borne to our ears. Soon a slender craft, not more than ten feet long, came drifting into view, and in it two blue-skins, who propelled themselves by means of crude paddle-like devices. Apparently unaware of our presence they drew their boat to shore not a hundred yards from where we lay concealed; and, having pulled the craft up upon the bank, they disappeared mirthfully amid the foliage.

I must admit that there was no justification for that which Daolgi and I now attempted. No moral code would condone us, no laws would exculpate; we were guilty of theft, sheer unadulterated theft, and had no excuse other than our need. Leaping by a common impulse from our hiding place, we dashed at full speed toward the canoe; and, reaching our intended prize, we shoved it hastily into the water, seated ourselves each at one end, thrust Yap Yap into the middle, and pushed and paddled with all our might for the center of the stream.

But, in our haste, we had been incautious. Attracted by our excited cries and still more excited splashing, the two blue-skins came racing back to the water's edge and, seeing their boat in the hands of brigands, they started a duet of unimaginable shrieks and screams. Of course, their agitation only made us push away at greater speed; and certainly it was well that we made haste.

Immediately, in a moment, they drew forth two long pipe-like instruments and began banging away at us with a deafening din.

Almost instantly there came a portentous buzzing just beneath my ears, and an invisible fire seared off a lock of my hair. Urged by some long-forgotten instinct I flung myself down flat in the bottom of the canoe and Daolgi hastily followed my example, shaking the frail craft so that it almost capsized. The horrible banging was repeated, and repeated again, and yet again; then, after a moment of terror, it ceased altogether.

And now my companion and I sat up cautiously, smiling to know that at least we were safely on our way to the sea.

CHAPTER XV

El Dorado!

ALL that night we glided steadily downstream, aiding the lazy current by dipping our paddles occasionally into the water, but taking care to move slowly and in silence. On both sides the verdurous banks hung dark and sinister; but neither they nor the waters showed any sign of human life, except when, at long intervals, a little tossing light bobbed slowly upstream, and instinctively we sought the opposite shore. Once, indeed, a swift, sudden move rolled inexplicably over us, almost upsetting our craft and filling our minds with pictures of red river monsters; once, where the stream was joined by a tributary, we were caught in a miniature whirlpool, and narrowly averted a deluge; once we were alarmed to behold in the distance a low and regular rectangle of light, which we recognized as a city. But evidently the town was many miles off, and before long, to our relief, a turn in the river bore us directly away from it.

All in all, we had every cause to be thankful. Not only was the canoe bearing us to the sea, but it was marvelously equipped for our immediate needs; beneath the seat we discovered that which no starving man could despise. Food, whole bags and boxes of food!—and we had scarcely eaten all that day! Ravenously we fell upon the supplies, without so much as noticing how coarse and tasteless was the cracker-like bread, or how unpalatable and poorly seasoned the mealy, potato-like vegetable. Yet, famished though we were, we did observe that much of the food, being but the disguised, dried flesh of some animal, was unfit for human consumption; and this unsavory substance we turned over to Yap Yap, who devoured it with gusto.

When the first pale yellow light signalled the advent of day we guided our little craft carefully to the bank, drew it up out of sight among the reeds and willow-like trees, took from it a supply of provisions sufficient for the day, and sought a quiet, shady place wherein to pass the hours until sundown. We had no difficulty in finding precisely the desired spot, and there, over-arched and walled-in completely by the reddish green foliage, lulled by the song of birds and charmed by the soft droning of insects, we spent the day half in sleep and half in a contented, whispered conversation. Evening found us refreshed in body and mind, and it was with renewed hope that we sought our little craft again, launched it upon the dark waters, and continued our cruise.

The distance of the ocean still remained a mystery, and whether we should reach our goal in ten minutes or a hundred days was a question we could not answer. Yet as the hours of the second night slipped by we became convinced that the sea was not far off. The stream had widened noticeably, and we estimated that the span from bank to bank was not less than half a mile; while the increasingly sluggish current seemed evidence that the river's course was nearly done. Then, as we began to speculate as to the remaining distance, we observed an amazing phenomenon: our canoe, after being virtually at a standstill for some minutes, began to drift backward, actually backward and upstream!

There could be but one explanation, I thought: the effect of an ocean tide, a tide weaker than that of the earth since there was no moon, and yet acted upon powerfully by the sun. In conformation of my suspicion I dipped my fingers into the water and brought a drop to my lips. All doubt was now dispelled—the taste was that of brine!

It is needless to recount in detail the remaining steps of our journey to the ocean. Of course, we at once

paddled to shore, lest we be borne hopelessly out to sea. Then, having stripped the canoe of all provisions, we pushed it out again into the waters and continued on our way by land. An hour or two later, after covering five or six miles across a bare and open country, we were delighted to hear from afar a roaring and a thundering that was strangely familiar—the booming of breakers against resisting ledges of rock. Almost with the sense that we were back among old and well-known scenes, we hastened our footsteps, while Yap Yap frisked ahead of us with wagging tail. And after a few minutes we found ourselves at the peak of a headland, dimly outlined in the starlight, beneath which the flying, foamy billows shone palely against the somber blackness of the land.

Even as we watched a faint, almost ghostly radiance seemed to spread above the eastern waves. Gradually that radiance deepened, until, in the first pale light of dawn, we became aware of a white-capped gray sea flanked by long gray cliffs and ragged, broken headlands. Just beneath us, to the left, the shore-line was dented by a broad bay, shaped like the half moon, where the waters of the river broadened into those of the ocean; yet no sign of a sail or of any craft could be seen in all that turbulent expanse, nor any evidence of human proximity. We did not wish, however, to take even the remotest chance of encountering the blueskins, and so proceeded without hesitation to the right, where the interminable succession of cliffs, bounded on the west by flat lands brown with a scraggly vegetation, made the presence of man seem more than unlikely.

After a few minutes' walk we observed that the sheer declivities of the palisades were varied in places by slopes that offered a possible foothold; and down one of these we made our way, not without difficulty, since the grade was nearer to the vertical than to the horizontal. But though Daolgi crawled with awe-stricken slowness on his hands and knees, grasping at each rock with the clutch of a drowning man, we finally reached the bottom without mishap. We now found ourselves on a broad and sandy beach, which spread in both directions as far as the eye could scan, until it was lost beyond distant folds in the cliffs.

AS I watched the rolling billows come foaming in across the sands, I felt the deepest exaltation I had known since reaching this planet. These very sands, I thought, should make me rich! These very sands should make me master where once I had been slave! Perhaps they would even aid me to find Ardu Twell and our lost fellow men! At the least, they might help me to learn whether Ardu had ever reached this planet, or had been killed by the meteorites in outer space.

For this reason I had few scruples about the contemplated fraud in making green glass. Not for a moment did I hesitate, though I realized that doubtless there were severe penalties for counterfeiting. It seemed almost as if our success were assured!—we already had the essential coloring matter, and the chief ingredient—sand—was present in abundance. Not that the task would be by any means simple, for we would have to keep a sharp lookout against detection; we would have to find several necessary constituents of glass, and to construct a furnace for fusing the materials; and, at the same time, we would have to find some means of sheltering and supporting ourselves.

We began, accordingly, with the satisfaction of primitive needs. After a few hours' search we found a sort of deep hollow or cave which the waters had scooped out at the base of one of the cliffs; and there, between the narrow dark walls perpetually resonant with the roar of the sea, we found a sleeping place and refuge from the storms that rocked these wild shores, returning thus curiously to the ways of our remote ancestors. For food we were forced to depend partly upon a succulent gray seaweed and partly upon the tough roots of a shrub that forced itself between the very stones of the cliffs; while for fresh water we had to rely upon a half-muddy stream that poured from the crest of one of the precipices.

Having solved the question of board and lodging, we were free to face the real difficulty—which was to devise an apparatus and to find materials for the manufacture of glass. Stone by stone, with Daolgi's assistance, I erected a crude furnace out of fragments of rock from the cliffs, cementing the pieces together by means of clay from above the cliff's edge, and using clay likewise to fill in the gaps between the rocks. But even when, after several weeks, the furnace was completely and apparently in working order, we had neither a sufficiency of fuel nor all of the essential constituents of glass. Like misers Daolgi and I hoarded every scrap of driftwood that floated to the beach, piling up the fragments in a great heap near the entrance to our cave; and it was with a real sense of loss that, having made a fire savage-fashion by means of flint and my knife, I burned the driftwood in order to manufacture potash out of the ashes. Still more of the wood, in its turn, was required as fuel in the production of the potash; and in the distilling of the final solution I had to make use of a crude pot which I had scooped out of a hollow, pan-shaped rock. But after the manufacture of the potash, my goal seemed almost within grasping distance, for only one necessary ingredient of glass was now lacking.

Any one of a number of substances might have served the purpose—some metallic oxide such as "red lead", or one of the more familiar sulphates or carbonates. But I was without facilities for producing even the simplest of chemical compounds, though I knew that they abounded about me, in the rocks and in the very waters of the sea. And all my efforts might not have availed had not chance intervened. One morning, straying along the beach, somewhat beyond my usual bounds, I came across whole gleaming white cliffs of chalk!—chalk, which would provide the very material I lacked!

Eagerly I gathered a supply of this valuable substance; then hastened back across the intervening miles to our cave, and burst in upon Daolgi with the exultant announcement of the discovery. But he did not seem quite so enthusiastic as I had expected, and listened with signs of boredom to my explanation that chalk was virtually pure calcium carbonate, and hence would serve perfectly for manufacturing a variety of glass. Now that we seemed within a stone's throw of success, Daolgi began to doubt the value of our undertaking, and suggested that possibly we were happier here as poor men enjoying the freedom of the beaches than we would be as rich men suffering the confinement of the iron cities.

But, of course, I paid no heed to such poetic vaporings, and turned at once to the completion of my project. My chief problem now was to produce a temperature high enough to melt the sand; and for a while, I must confess, that problem threatened to be insuperable. Valuable as the driftwood had been in producing potash, it seemed powerless as straw for the manufacture of glass. I made many attempts to secure the requisite temperature, growing first impatient and then exasperated and then furious when I increased the quantities of fuel in vain, while the poet stood by with an ironic smile and occasionally admonished me to give over this childish pursuit after colored glass and turn to some occupation befitting a man.

But his evident amusement only made me grit my teeth the more firmly and hold to my resolution. Days lengthened into weeks, and weeks into months, but still I met with no success; I began to weary unspeakably of these inhospitable shores, of the bleak monotony of gray sea and grayer land, of our crude cave dwelling and of our seaweed diet. But though Daolgi urged and pleaded that we set off for more alluring regions, I was determined not to leave. Having exhausted my supply of driftwood, I experimented to no effect with fires from dried seaweeds; then in vain I burned the desiccated roots and leaves of small plants; then, equally in vain, I gathered the dead, sapless stems of shrubs from the plain above the cliff. To melt the "batch" as glass makers call it still seemed beyond my power; and at last I was forced secretly to admit that I was attempting the impossible.

Had it not been for the persistent thought of Ardu Twell and the other explorers, I might not have persevered so long. During these dreary weeks Daolgi and I had spoken but little of the previous expeditions, and I know that he for one had come to regard Sani Par and the others as beyond our power to save. Yet, regardless of the waning days and months, I still felt that there might be some slender chance of rescuing them; and it was perhaps not so much my reason as my great desire and my great loneliness that lent strength to this belief. But my hopes, never too firm, were beginning to die slowly from lack of fuel; gradually, under the prods of passing months and of repeated failure, I found my early confidence fading into a dull and settled despondency—despondency of ever gaining power on this planet, or ever finding a trace of our vanished fellows.

IT was at the very moment of despair that I enjoyed my triumph. In response to Daolgi's repeated entreaties I was actually on the point of acknowledging my failure, and another day would have found me ready to set forth once more into the unknown. For the last time, I explored that region where I had dwelt so long, dreamed of so much and accomplished so little; and in my anxiety to leave no stone unturned, I wandered much further from my cave than ever before, not actually with the expectation of making any discovery, yet urged on by the last feeble flicker of my hopes. On the bare and resolate plain above the beach my attention was attracted by a peculiar black substance jutting from a layer of rock, a substance strangely unlike any variety of stone I had ever known, a hard and yet brittle substance that I shattered easily with a piece of flint. Upon inspection, it appeared to be a form of carbon—impure, it is true, and yet probably combustible!

Now I remembered that, in the Museum of Ulum University, I had seen a bit of an odd black mineral known as coal, which had been used for heating purposes by the barbarians eight hundred thousand years ago, until they had exhausted it all except for the few fragments preserved as curiosities! Yet here, on the plains of Venus, were virgin deposits of this unique material!—unlimited deposits of concentrated fuel!

I shall never forget Daolgi's bewildered expression that evening when I returned to the cave laden with chunks of what he imagined to be black rock. His serious and half-frightened glance seemed to convey doubts as to my sanity; and those doubts had apparently crystallized into certainty by the time I had ground the black rocks to bits and shoved them into the furnace. Of course, he did not fail to inquire what I was about, but I knew better than to reply; and I could watch his wonder growing as I arranged some dry seaweeds and dead twigs beneath the coal and, having struck a spark by means of the flint, kindled the whole mass into a blaze even hotter and more vigorous than I had anticipated.

It was now my turn to laugh at the poet. Having delivered myself of a few commonplaces regarding the value of perseverance, I exacted his promise to accompany me tomorrow to the coal field, and turned with rare relish to my evening meal of seaweed.

But despite my enthusiasm, it took several days to secure even a moderate supply of coal. Not only did Daolgi and I have to carry the fuel miles across a difficult country, but our methods of mining were of the crudest, and we had literally to break and tear the mineral from its native ledges by means of improvised stone implements. Yet I had every reason to be cheerful, for I felt that success was but a matter of days. When at length our furnace was well supplied with fuel and a fair reserve was piled in our cave, I turned anew to the problem of melting the sand, and, after one or two experiments, found that the coal actually produced the requisite heat! There came a time when I surveyed a viscid, boiling mass, wherein the molten sand was mingled with the potash and the lime and the copper oxide that served for coloring purposes; and it was in trembling impatience that I awaited the result, striding in mingled hope and fear before the furnace that was perhaps to be our salvation, and finding in the end that the glowing liquid was solidifying into the shining translucency of green glass!

CHAPTER XVI

"Gulgul"

THE moment of our arrival in Venus may have been occasion for rejoicing; yet it gave me not one particle of the satisfaction I experienced at the moment of successful glass manufacture. I am afraid that I became actually hilarious with joy; I indulged in wild, jubilant exclamations of triumph; I leapt up and down and shouted like a school-boy; I went so far as to embrace Daolgi in my delight. But Daolgi, though he did show some interest, exhibited none of my enthusiasm. As though he were the scientist and I, the poet, he inquired dispassionately as to the exact value of my invention while I cast aside the restraint of months by painting gorgeous pictures of a golden, or (as the Venerians would say) a glassy future.

The first objection raised by Daolgi was that the glass I had manufactured was in one solid mass, whereas the Venerian coins were of the size and shape of small marbles. To this I replied that unminted gold is regarded as scarcely less valuable on earth than minted, and that even crude green glass would doubtless be held precious on this planet. Besides, it would be impossible for us to imitate the Venerian coins, since we did not know their precise size, and any attempt to copy them from memory would probably result in our conviction as counterfeiters; whereas, if we were apprehended with the mere fragments of "gulgul," we would plead that we had unearthed some buried treasure or else discovered a "glass mine."

To this logic Daolgi could find no satisfactory answer. He even murmured a restrained approval when, by means of a large rock, I shattered the newly made glass into bits, and then divided the fragments between the two of us, bidding him conceal his share in tightly buttoned pockets. Considering that I was presenting him with a fortune, he might have been gracious enough to show some rudimentary appreciation; but, instead of thanking me for the gift, he merely growled at sustaining one or two trivial scratches; and when I

reminded him that the injuries were due to his own carelessness, he mumbled (very pointlessly, I thought) that the fault was not with him but with conditions in a world where broken glass was considered priceless.

It did little good to expostulate with the poet, or to argue that we must obey literally the maxim, "When you are in Venus, do as the Venerians do." "When you are in the forest, do as the monkeys do!" he snapped in reply; and he swore that he saw no merit in deeds which, were we back on earth, would condemn us to a hospital for the hopelessly insane. None the less, he kept the colored glass.

Having manufactured a second supply of green glass and laden ourselves so heavily that our walking was impeded, we bade farewell to our cave and went adventuring once more into the unexplored. This time we did not seek to avoid the blue-skins, but even hoped for a meeting with them, since we were prepared to address them in the language they spoke best. By the pale yellow light that filtered warily through the gray clouds of early morning, we took our course northward along the beach toward the mouth of the river, for there, we thought, we might discover some native habitation. But, having reached the river, we followed its bank for miles without sign of any living creature other than the great black gull-like birds that circled aimlessly above the water. It was several hours before we met with our first evidence of human life; and then our discovery of the blue-skins was so sudden as to be disconcerting.

We had just made our way through some thorny brush that scratched our faces, tore our clothing, and half blinded us; and coming out abruptly into an open space near the river's edge, we observed half a dozen hexagonal iron buildings about a hundred yards beyond. Though only about fifty feet high, they were modelled unmistakably after the city we had left—a Venerian town in miniature!

As we stood hesitating at the edge of the clearing, wondering whether to plunge back to the safety of the bushes or boldly to stride forward, we noticed several printed signs on iron pedestals halfway between us and the buildings. The largest, which we could decipher even at this distance, bore the name of the place, the "Village of Waschu"; the smaller signs, which we made haste to inspect at reading distance, contained warnings regarding the local law. We were advised, for example, that all vagabonds entering the town would be imprisoned for not less than two years without a trial; that, according to the latest judicial decisions, all men and women without work or money were vagabonds; that "smaller letter men" would be considered vagabonds only after they had spent their last bit of glass, and that "Large Letter Men" were especially encouraged to settle in the town and would be provided with comfortable residences, servants and lavender sawdust at public expense.

Needless to say, these notices attracted no more than our mild amusement. But there was one sign—a dark red placard looking already old and weather-beaten—that we read with deep interest mingled with dismay:

"10,000 PIECES OF YELLOW GLASS REWARD

"For the Capture of Three Escaped Convicts!!!

"For information leading to the arrest and execution of three prisoners who escaped from the Hardwood Sawdust Mill in the City of Sohsohe during the recent conflagration, the government of Wultho offers a reward of 10,000 pieces of yellow glass.

"The prisoners were all of a freakish and unusual character, and description of them is difficult. One, a beast of a type never before known, with black fur and sharp, dangerous teeth, will be recognized not only by his savage disposition but by his habit of leaping at his foes with harsh, explosive growls like the noise of no other animals. The two other convicts, while considerably larger, are much less formidable and manifestly less intelligent, and are thought to be servants of the little beast. In appearance they are half bestial, half human, with blue eyes and light, colorless skins proving their kinship with the monkeys. But they are taller and more broad-chested than human beings, and are believed to have escaped from some remote island still unexplored by civilized man. No sign of any of them has been seen since the sawdust fire, but they are not known to have perished and authorities on wild life hold that their instinct must have driven them into hiding somewhere in the wilderness."

Upon reading this sign we felt an urgent impulse to flee. And no doubt that impulse would have been obeyed—had not Yap Yap intervened and made flight impossible.

Scenting a peculiar snake-like creature crawling in the grass, the dog leapt forward suddenly with a snarl and a growl. Then, as the animal disappeared through a hole in the ground, he stood defiantly above the burrow-entrance and expressed his baffled rage in loud barks. Of course, Daolgi immediately silenced him, but the harm had already been done; scores of the villagers, roused by the unusual noises, came rolling to the edge of their iron streets with strident exclamations. Upon seeing us, they set up still shriller cries, till the very heavens rang with their amazement and terror; and almost simultaneously dozens of them darted with whistling velocity toward us, to the side of us and all around us, so that, within an instant, escape had become impossible.

It seemed that literally the whole town had been summoned forth, for after a moment we found ourselves surrounded by an impenetrable multitude, row after row of somber-clad blue-skins, grimacing, chattering, crackling in evil laughter. At first they did not menace us directly, but swarmed about us in a circle of twenty or thirty yards in radius, apparently afraid to venture closer; and any movement on our part, any sign of a threatening gesture stirred them with visible tremors. Noting their dread of us, Daolgi and I strode toward them defiantly, crying, in the native tongue, "Make way! Make way!" And those in front pressed fearfully back, but at the same time those to our rear closed in upon us, so that our efforts gained us nothing.

IT was at this juncture that one of the blue-skins, slightly larger than the others and wearing a conical hat that greatly enhanced his apparent height, approached us with a gesture of authority. "As agent of the Government of Wultho and Mayor of Waschu," he announced, pompously, "I order you placed under arrest!"

Whereat we bowed low, and half a score of blue-skins with long barbed wires advanced hesitatingly from the throng, apparently with no great relish for the task in hand.

We were quite willing to spare them that task. "Just one moment!" I shouted, at the top of my voice, waving my hands so menacingly as to petrify our approaching assailants "On what charge do you arrest two law-abiding strangers?"

"According to the general practice," explained the Mayor, again coming forward and bowing politely, "we will arrest you first and decide upon the charge afterwards. We trust that you will be discreet enough not to object——"

But the Mayor got no further. Something about that official—I do not know what, perhaps it was his red

hat—had aroused Yap Yap's disfavor. With a howl, our protector sprang at the enemy's throat. The enemy thereat proved himself surprisingly agile, and in the twinkling of an eye was hidden from view amid the crowd, incidentally losing his hat during the retreat. It was several minutes before he dared rescue his official headgear, and meanwhile the throng had been backing away from us with frightened mumblings and mutterings.

Thoughts of escape were once more active in my mind when the Mayor, having reinvested himself with his hat and his dignity, again ventured to approach us (though not so closely as before), and again ordered our arrest, designating us solemnly as "those well-known vagabonds who have escaped from the sawdust mill at Sohsohe, and have been sought in vain over the length and breadth of the land!"

At these words I professed great surprise. "Mr. Mayor," said I, with one eye on the official and the other on the bearers of the barbed wire, who stood hesitating half a dozen paces away, "I fear that you make a sad mistake. My friends and I"—here I pointed to Daolgi and Yap Yap—"are not vagabonds, but wealthy citizens traveling through the land for pleasure."

As might have been expected, this remark was greeted with suppressed cackles.

"Yes, indeed, you look like wealthy citizens!" sneered the Mayor, pointing to our soiled and ragged garments. "Large Letter Men, aren't you?"

"Exactly," I affirmed, on a sudden inspiration. "My name is Large E., Large R."

"And mine," added Daolgi, catching the point, "is Large D, Large K." And then, indicating Yap Yap, he stated, with a waggish gleam in his eyes, "My friend's name is Large Y, Large Y."

It was at this point that "Large Y, Large Y", doubtless misunderstanding Daolgi's gestures, made another growling advance upon the Mayor, so that we had no immediate opportunity to note the effect of our announcement. But after the disturbance had been quelled and the Mayor had again found safety amid the rabble, we observed that the blue-skins were eyeing us with a new curiosity and something of surprise, as though asking themselves whether, after all, we might not really be "Large Letter Men."

I thought it best to allow them no time for doubt. Taking advantage of the momentary lull, I reached into my pocket, seized several fragments of green glass, displayed them with significant cries of "Gulgul! Gulgul!" and then flung them disdainfully toward the multitude.

The list of injured in the ensuing stampede was afterwards calculated to be well up in the hundreds. I had never before witnessed such a pandemonium; it seemed as if all the blue-skins were intent upon being in the same place at the same time. In their eagerness to reach the green glass, they literally flung themselves over one another, head over heels; they pushed, shoved, pounded, trampled, pummeled, bit and tore like a panic-stricken mob at a fire, shrieking and screaming all the while like mad beasts, rolling over one another, piling on top of one another till they lay on the ground layers deep, a writhing, heaving, convulsive mass of legs and arms and almost indistinguishable human trunks.

I do not know how this tempestuous multitude ever came to resolve itself again into individuals. But somehow the miracle happened; somehow, after many minutes, the victors and the vanquished began to emerge, all of them bruised and battered, most of them with torn clothes, and many bleeding a ghastly bluish, almost purple blood. Some, as they went limping and groaning away, sighed, not for their wounds but for their failure to gain any of the treasure; others, more fortunate, exhibited little trophies of a gleaming green, and were the center of attraction for scores of satellites. And among these was none other than the Mayor, who, after plunging into the fray and issuing with an eye slightly blackened and a gashed and swollen lip, found himself the smiling possessor of a particularly large bit of "gulgul."

As long as the uproar lasted, Daolgi and I were scarcely heeded. But after the clamor had begun to subside, the blue-skins naturally turned to us as the dispensers of the treasure. All doubts as to our aristocratic rank seemed to have been dispersed, and we noticed that several blue-skins had fallen down on their knees before us, while others, less demonstrative, regarded us with looks of awe so manifest that we had difficulty not to laugh.

Among the latter was the Mayor, whose opinion of us had been strangely transformed, and who admitted his previous error in grave and obsequious language.

"My dear Large Letter Men," said he, with the air of one delivering a public oration, while his fellows pressed closely about to listen, "how can you ever pardon me for mistaking you for vagabonds? Not every day do we find men who cast green glass about as though it were worthless; and not every day do we have the honor of welcoming such distinguished visitors to our town. Therefore, in behalf of all the citizens of Waschu and by virtue of my rank as Mayor, I offer you the freedom of the village!"

DAOLGI and I had no idea what the "freedom of the village" might be, but thought it best to accept the honor, particularly since it was offered in such sedate and wordy fashion. It was the poet that undertook to reply to the Mayor, and he accomplished the task in excellent style, expressing our gratitude in words so sonorous and meaningless as to sound almost official. Although no one (and probably not even he himself) had any notion what he was saying, it was apparent that he was making a great impression; and, encouraged by the looks of uncomprehending admiration that everywhere greeted him, he spoke for at least half an hour; after which he retreated to my side amid loud applause.

The Mayor now motioned us to follow him; and, attended still by an admiring multitude, we accompanied him into the heart of the town. We had the chance for only a casual glance at the architecture, which was all that we required, since Waschu was but the city of Sohsohe in miniature. After being escorted through a little elliptical doorway that seemed the exact duplicate of all other doorways on this planet, and through a subterranean corridor precisely like all other corridors on Venus, we found ourselves in a dimly lighted apartment consisting of half a dozen connecting hexagonal rooms, and were officially invited to remain as long as we desired, and to receive both food and shelter at public expense.

CHAPTER XVII

The Power of Green Glass

BEFORE Daolgi and I had been in Waschu many hours, we decided upon a change of residence. The apartments assigned us by the Mayor were doubtless considered sumptuous, for their walls were of corrugated steel, and their floors were sprinkled with lavender sawdust; yet we did not enjoy dwelling beneath ground, and the supplies of light and air were so meager as to remind me of prison. Hence it was

not long before we paid a visit to the Mayor and expressed our desire to rent or purchase more suitable quarters.

The official listened in obvious surprise, and assured us that we already occupied the most suitable quarters in Waschu.

Thereupon we informed him of our desire to be lodged above ground. But he merely looked blank, and reminded us that all the space above ground was reserved for business purposes.

"What if we are willing to buy some such space?" I suggested.

"Oh, of course, that would be different," he admitted, eyeing us quizzically. "But surely you would not be guilty of such extravagance. You could not get any space above ground without buying a whole building."

"How much would a building cost?" I continued, unperturbed.

The Mayor's astonishment had given place to sheer bewilderment as he replied, evasively, "That would depend, of course, upon the building in question."

"Any building now for sale?" I persisted.

The Mayor paused to regard me appraisingly before he responded, "Naturally, all the buildings are always for sale—if they can be sold profitably. But the price is extremely high."

"How much?" I inquired.

The Mayor hesitated long, like one about to make a staggering announcement. "Well, the market price for the best—you would want the best, of course—is two and one quarter pieces of 'gulgul.'"

"Two and one quarter pieces?" I repeated, slowly and contemplatively.

"In other words, about eleven-sixteenths of an ounce," he explained, in an impressive manner.

"Yes, that really is a lot of money," I agreed. "But don't you think the price might be reduced?"

"I'm afraid not." The Mayor paused, and shook his head sadly. "The owners are really quite stubborn. As I told you, the price is excessively high——"

"Oh, well," I snapped out, shrugging my shoulders like one accustomed to great transactions, "let it go at that! Why haggle about details?" And, delving down into my pockets, I displayed to the Mayor's gaping gaze several lumps of glittering green "gulgul."

"How many buildings are there in the city?" I inquired, conceiving a dazzling idea.

"Seven," he replied, with the air of one in a daze.

"Very well then," I pursued, relentlessly. "Seven times eleven-sixteenths is seventy-seven-sixteenths. Would you mind getting a pair of scales?"

From the way the Mayor stared at me, I am not certain whether he regarded me as a madman or a genius. But, after a moment, he apparently decided that I was merely a practical joker, and burst into a low explosion of crackling laughter. It was many minutes before I could convince him that I was serious; and even after he was convinced, he could do little more than gape in bewilderment, for never in all his life, as he assured me, had he witnessed such an exhibition of wealth.

Yet through his agency, and by virtue of a gift of a tenth of an ounce of "gulgul", the transaction was arranged in the course of the next day or two. The owners of the buildings—which belonged not to individuals but to large groups of financiers—appeared not only willing but even greedy for a sale. And although I realized that they were trying to gouge me and that five ounces was above the market price for the seven buildings, yet I was willing to win a reputation for liberality at the cost of a scrap or two of green glass, and paid without protest a sum that they doubtless regarded as prodigious.

And so it happened that Daolgi and I became the exclusive and legal owners of Waschu. So it happened that we set ourselves up as uncrowned potentates, receiving the respect if not the reverence of the people by virtue of our ability to purchase their goods and their services. Because we were immensely wealthy, we were regarded as fountains of wisdom, justice and benignity; and because we controlled that which was the real ruler of the land, the "unwritten law" bestowed upon us the practical management of the community. Being richer than the Mayor (who previously had been the most affluent man in Waschu) we rapidly came to supplant him in authority; and it was not many weeks before his power had dwindled to a shadow. Whenever a new statute or local ordinance was contemplated, we were now the ones consulted; whenever a judicial decision was in doubt, we were the final court of appeal; whenever a new official had to be appointed, an old one to be removed, or a public improvement to be undertaken, we had the power of veto or command. All in all, considering the transformation in our lot, I was beginning to agree with the blue-skins in their worship of "gulgul."

HAVING installed ourselves in a suite on the top floor of one of the buildings—a suite from which he had turned out an absurd organization known as the "Bureau of Trade"—Daolgi and I turned our attention to remoulding not only our own lives and the lives of the citizens of Waschu, but the destinies of the planet and even of our native earth. Despite all the vicissitudes of this barbarous world, we had not yet forgotten the mission that had brought us to Venus; and while well over a year (reckoning by earthly time) had passed since our arrival, and while our comrades at home were no doubt mourning us as lost and sighing over our wreaths in the Cenotaph of Lost Explorers, yet our thoughts of signalling them remained active, and we still had hopes of bringing humanity to succor on this warmer globe.

Now, for the first time, I could devote myself directly to this supreme purpose. No sooner had we entered our new quarters than I set aside several rooms as a laboratory, and began to purchase chemical and electrical equipment for the construction of a radio. In this small town it was not always possible to procure the desired materials, and I was severely handicapped by the crude and barbarian apparatus that represented the latest improvement on this planet; yet I toiled ceaselessly and experimented freely, and at the end of two or three months had constructed a broadcasting contrivance that would send messages for a few miles. The difficulty now was to secure that tremendous concentration of electrical power necessary for flashing messages from planet to planet; and how long it would take to accomplish such a concentration was a question I could not answer.

But meanwhile, of course, I was concerned with a problem more imminent, more personal—and, for the time being—more important. Now, if ever, was the time to seek news of Ardu Twell and the missing men and women; now was the time to go to their assistance. Accordingly, I sought to tap every available source of knowledge. I questioned the Mayor and other blue-skins closely; I caused descriptions of the lost ones to be broadcast; I advertised in leading papers, and had the highways lined with enormous placards; I offered large and tempting rewards for useful information. All in vain! At least fifty times I grew excited over false alarms, wasted my energy on empty clues; and, in the hope of seeing Ardu Twell or Sani Par, I was introduced more than once to freakish and degenerate blue-skins, and even to imbeciles, monkeys and baboons!

But my chief return from all this effort was ridicule. Never was I swept by such mockery as when I mentioned that the missing persons were from the earth. Not even the sanctity of my wealth protected me from derision—derision tempered only by the belief that I could not be in earnest. And when, for self-protection, I replied that I too was from the earth, my hearers responded just as my prison companions had responded months before. A perfect tempest of laughter beat me in the face; no one had ever come from the earth, I was assured, and no one ever could. And this was proved to me by irrefutable logic. Did not the ancient religious books or "Skullas" demonstrate that the universe had been created for the exclusive use of the Venerians? And had not science shown the earth to be a dead and uninhabited planet?

As for my own peculiar appearance and enormous size—these were clearly due to my being a foreigner from some little known land. But, abnormal and monstrous-looking though I was, I could not impose upon the gullibility of the masses by claiming to be from another world.

It was not long before, faced with a stone wall of incredulity, I had ceased trying to persuade the Venerians that I or any other man had come from the earth. More and more I was growing convinced that if any of the previous explorers had reached this world they had perished—how else could they have disappeared so completely? Yet, with that hope which struggles and stays alive in the face of reason, I kept looking for traces of the missing men even after I was half resigned to having lost touch with them forever. And whereas, at first I met with no encouragement; while at first I was baffled utterly, not knowing where to turn nor how to act, it was not many months before a possible line of inquiry began to open before me.

The papers were now full of accounts of expeditions to Xerion, in the wilds of Guff. The first exploring party, months before, had failed to secure specimens of the man-eating giants from the jungles of that dark continent; but the huntsmen had at least caught sight of those savages, and verified not only that their faces were of the hue of chalk, but that their fingers were spiked with eagles' talons and that their blue eyes shot forth an evil light which dealt instant death to their foes. Opinions as to their height were now strangely at variance, some members of the expedition maintaining that they measured at least fifteen feet, and others contending that they were no more than nine or ten feet tall. It was agreed, however, that they were the most ferocious and bloodthirsty of aborigines, and that their muscular arms could crush a boa constrictor. Further details were expected soon to be made known, and it was still hoped that some of the giants would be seen in life-like attitudes in the museums: for a new and powerfully equipped expedition was setting out and it was believed that, with the aid of machine guns, liquid fire and poison gas, the entire tribe would be subdued.

Pondering over the accounts of these strange savages, I remembered what I had been told long ago in jail about the blond inhabitants of Guff. And at the same time I recalled that it was from this continent—in fact, from the very country of Xerion—that the mysterious wireless reports had seemed to issue. It did not appear exactly credible that any of the lost explorers were actually there, for the tallest of them had been scarcely over six feet in height, and I had not known any of them to wear goats' horns or eagles' talons or to be especially bloodthirsty. Yet was it not possible that some of them had been seen there and confused with the giant savages? The more I thought about it, the more convinced I was that the matter deserved investigation; and, as all other clues had failed, I could not reconcile myself to neglecting even this faint hope.

And so it was that, with the suddenness of a thunderbolt, I astonished Daolgi one morning by announcing that we must prepare for a trip to Guff.

To my surprise, Daolgi offered few objections. "A trip to Guff? What's the use of going to Guff?" was his perfectly natural first question.

To this I frankly replied that probably the excursion would gain us nothing. But at least it would enable us to see something of the world and at the same time it would help us to do our duty to the missing.

"All very true," admitted Daolgi, contemplatively. "But Guff is a long ways off. They say it's a frightful ocean passage, and then a worse trip overland——"

"Yes, but why take the ocean passage and the trip overland. We've got 'gulgul', haven't we?"

"Even 'gulgul' won't remove the ocean," suggested the satirical Daolgi.

"You don't understand," I insisted, impatiently. "It's needless for us to travel, savage-fashion, in a ship across the sea and then on foot over deserts and jungles. Why not ride at our ease in a dirigible?"

"I didn't know there were any dirigibles on this planet," confessed the poet.

"There are plenty of them," I explained. "But ordinarily they are used only in wartime. In fact, they're all owned by the government, and are expected to be employed only for public purposes."

"That means we're out of it!" sighed Daolgi.

"Not at all! I've been thinking out a plan. Suppose that I arrange with the Commissioner of State to have our expedition to Guff declared a public purpose. That's where 'gulgul' will come in useful."

And while Daolgi stood gaping after me with wide, astonished eyes, I hastened out to prepare a message for the Commissioner of State.

CHAPTER XVIII

Across the Hurricane Ocean

A WEEK later the entire population of Waschu came out to gaze in awe as the dirigible *Eagle of the Seas* alighted on the plain just to the east of the town. It had been rumored that Daolgi and I were to set out by air for the wilderness of Xerion; but not until the great balloon actually glided into sight, its cucumber-shaped contour dark against the morning skies, did the interested natives believe we would actually take such a risk. Many were the comments of envy and surprise as, with a whirring of motors and a droning of wings, the airship came listing down to rest. But mingled with the amazement and wonder were words of pity and regret, and some of the more devout flung themselves down upon their hands and knees to pray.

Among the latter was the Mayor himself. Fervently he begged the gods not to imperil us needlessly or to let us be gone too long, for during our residence, he said, the town had enjoyed the highest bank clearings in its history.

Accompanied as ever by the adventurous Yap Yap, we darted through one of the little oblong entrances to the dirigible, waved a final farewell to the crowd, slammed the door behind us—and gave the order for departure.

We now found ourselves in a little hexagonal compartment beneath the great bag of the airship. On two sides the walls were of glass, so as to permit unimpeded observation; and on the other sides were doorways leading to rooms equipped for our own comfort

and for the housing of the crew. No members of the ship's company were yet to be seen, but we knew that there were twenty of them in all, experienced blue-skins enlisted in the Wulthonian National Air Navy; and we also knew that they were now completely subject to our orders, and were instructed to conduct us to Xerion or whatever other part of the planet we might direct.

A few minutes later we were high in air, the plains and hills of Wultho tumbled beneath us in tumultuous panorama. To the east the ocean spread an unending glittering sheet of blue, above which we soon found ourselves racing almost with bird-like smoothness. Or perhaps racing is not the proper term, for while we traveled at a speed of two miles a minute, we were aware of no motion except for the fluttering and buzzing of the motors. On all sides of us, in the far distance, floated lazy white clouds, apparently on the same plane with us; and beneath us, separated by an azure abyss thousands of feet deep, the waters looked flat and unruffled save for an occasional black point—could it be a vessel that seemed fastened like a badge to the shining breast of the sea?

Hour after hour passed; the sun mounted brilliantly to the zenith and then slipped away gradually to the west; and with changeless flight we continued across an ocean that seemed monotonous and utterly unchanging. The speedometer told us that hundreds of miles were lengthening into thousands, yet it was hard for us to believe that we had made any progress at all. Always the wide circle of the sea, roofed with distant cloud-flecks, seemed to constitute the universe; not an island was anywhere visible, not a speck of land, and we felt almost as if we might continue cruising thus forever.

When evening came, the waters still maintained their majestic serenity, reaching ghostly beneath us in the starlight. And now, as Daolgi and I sat gazing out into the void blank world, we discussed in whispers the object that had brought us thus strangely across these strange seas. We wondered whether this were not but another vain, foolish flight; or whether, at our destination, we should be greeted by sight of comrade faces. But we did not allow ourselves to indulge in sanguine expectations, though more than once the name of Ardu Twell flashed through my mind. And as we gazed in silence toward the east, where a bright orb not far above the waters brought back old familiar memories, we felt a deep, depressing loneliness, a hunger for the sight of kindly faces and the touch of kindly—yes, why not admit it?—of kindly feminine hands.

This desire had deepened into a profound impatience when morning arrived and we saw that we were still gliding with the same even flight across the same unbroken sea. The suspense, the inactivity, was becoming oppressive; and we lolled gloomily about the narrow confines of the observation room, irritating each other by the most harmless remarks, and eager for something to happen, almost anything to break our growing boredom. Yet still another day must elapse before we had traversed the six thousand miles of the Hurricane Ocean, and nearly two days before we could hope to reach the jungles of Xerion.

On the second day, however, the monotony was unexpectedly broken. Perhaps the Hurricane Ocean felt bound to justify its name, for toward noon the skies began to be clouded, and a patch of purple to southward was rising and deepening ominously. At the same time, an unwonted activity began to be observable among the crew. Like rats in a trap, they scurried to and fro, taking care to see that every hatch and porthole was closed securely. Then the captain dashed feverishly upon the scene, leaping up and down like a jack-in-the-box. Order after excited order came snapping forth, while the men almost fell over one another in their eagerness to grab excess ballast and hurl it through trapdoors into the abyss. At the same time, we were almost flung face downward on the floor as the equilibrium of the ship abruptly shifted and its nose was pointed at a sharp angle into the clouds.

A TREMENDOUS gale had come up by now, and the craft was lunging and shuddering like a helpless schooner in a tempest. Even through the closed compartments we could hear the wind, a greedy beast of prey, go screeching and snarling past. Mingled with its howling was the cannonade of distant thunder, growing closer and closer; and the sharp-fanged lightning cut like rapid knives through the clouds, with vivid white and ghastly pale-rose flares. On a rising torrent of darkness we were borne away, borne up and away, tossed pellmell, driven scampering like a leaf on a reckless gust. The rain came pounding down on the dirigible's great bag until I feared it would burst; the hail hammered with a myriad blind missiles, beating the ship down though it confusedly strove to rise. And all the while the lightning glared nearer, the long dazzling streaks sweeping by with fitful and terrible incandescence; and the thunder banged louder and louder in a deep, continuous artillery, rumbling and booming with demoniac ear-splitting menace. Clinging to the steel rails as the ship plunged and swayed and shook and rose and tossed, Daolgi and I stared at each other in wordless terror; and with faces blanched and knees that trembled even more than our trembling, heaving craft, we awaited the approaching end.

Suddenly we seemed to be whirled and swung around on a gigantic wave. Then came a tremendous thudding and a listing that made us almost lose our balance and more than half lose our senses. Then, while the thunder rang with startling resonance and we felt that the bolt of doom had struck, we felt ourselves lunging forward, the floor all at once grown precipitous. And after a violent tremor and a wrench that sent us sprawling in all directions we found to our amazement that the ship was sailing on an even course while the warm sunlight streamed through the windows. But just below us was a sea of glittering white and opaque purple vapors; and in those obscure depths the lightning still blazed and the thunder still growled its menace.

But it was many minutes before our palpitating hearts had ceased their rapid thudding and we had begun to recover from the shock. And as if we had not had sufficient excitement for the day, new causes for misgivings were quickly to follow. It was not long before an anxious mumbling and murmuring among the crew, punctuated by an occasional explosive epithet, gave warning that not all was well with the vessel. Daolgi, reclining opposite me on a couch as he convalesced from the effects of the storm, pricked up his ears and stared at me uneasily—the same thoughts were running through both our minds. Had the tempest-wrought some injury to the delicate mechanism of the dirigible? Had the engines or the steering apparatus been seriously damaged?

Not being a lover of suspense, I sent at once for the Captain. After commending him for his management of the vessel in the high winds, I inquired what new trouble was in store. At this question he seemed embarrassed, and muttered something about "the worst storm in his experience" and "not being to blame for the danger." As I was still entirely in the dark as to what danger he meant, I pressed him for further information; and it was with the utmost reluctance that he confessed the truth. The engines and driving gear of the vessel, he assured me, had fortunately been unharmed; the gas tank had been uninjured and the rudder and pilot wheel undisturbed by the elements;

yet one of the most serious of losses had befallen the *Eagle of the Seas*. To be precise, its compass had been broken, and we were lost amid the wastes of the Hurricane Ocean.

"But haven't you another compass?" I inquired, thinking the Captain unpardonably negligent in providing only one.

"Another compass?" The officer stared at me as if not believing that I could be serious. "Do you know how much a compass costs? Three pieces of 'gulgul!'"

"But what are we going to do now without one?" I asked.

"That's just what I'm wondering," admitted the Captain, with a perplexed frown. "I've never been without a compass before."

"Can't you reckon your position by the stars?" I suggested. And I would have explained how mariners on earth compute their latitude, had he not greeted me with a look of amazement which plainly said that this method was not in vogue on Venus.

"The only thing I can see to do," sighed the Captain, absently, after a moment's silence, "is to turn around and go straight back home."

"How are you going to go straight back home without a compass?" I inquired, marveling at the blue-skin's obtusity.

"That's so. That's so, of course," he murmured, glumly. "I hadn't thought of that."

"At least, the sun will tell you which is east and west," I reminded him. "If you fly on toward the sunrise, you can't miss the continent of Guff, can you?"

"No, not very easily. It stretches all of five thousand miles north and south."

But terror shone in his dark little eyes as he added, "Only, it's a very wild continent— dreadfully wild and unknown. Many men have been lost there. It would be suicidal to travel there without a compass."

"Just the same, we'll have to risk it," I decided, thinking the horrors of Guff probably much exaggerated. And when the Captain attempted to argue, I silenced him with a brusque command, and threatened to report him for insubordination.

For the rest of that day we continued steadily eastward across the Hurricane Ocean.

CHAPTER XIX

Lost!

THE following morning upon awakening we were startled to see land just beneath us. A densely wooded cone-shaped peak, apparently volcanic in formation, shot upward for thousands of feet, till its rocky tip almost touched the base of the dirigible; and around it on all sides stretched the unbroken sea. For perhaps half an hour we cruised about this island, looking for trace of human habitation; but the deep reddish green forest showed scarcely a rift save where a foaming torrent leapt from the crags. Almost the only sounds were those of some unseen beast rustling amid the undergrowth, and of some bird that called eerily with shrill notes from the deep foliage—"Wo lour, wo lour, wo lour," uncannily, like a soul in pain. But there was not a sign that man had ever disturbed this wilderness.

"Strange. Very strange," the Captain confessed, when we were once more on our way and the solitary mountain was no more than a dot against the green immensity of the waters. "Five hundred times in my life I have crossed the Hurricane Ocean, but never before have I seen that island. I might almost believe it one of the Pellotas group, but we can hardly be that far north. And there are very few known islands south of the Pellotas."

And as the Captain pored perplexedly over a great map spread out on the table before him, he kept mumbling to himself, "Strange. Very strange. We must be far out of our course. Very far out of our course."

But within an hour his mind was on other subjects. Land was again in sight, this time manifestly not an island, but the continent of Guff! Abruptly out of the water's edge shot sharp glittering mountains, one crowding upon another in tumbling, billowy succession, their lower slopes a dreamy blue or hazy gray, their higher altitudes a defiant, gleaming white. In a long continuous line they stretched from horizon to horizon with jutting peaks, and pyramidal crags, and domes like giant heads, all fantastically banded together like a waiting army of the gods. But nowhere was there sign of a break in their stalwart ranks, and their aloof and alien grandeur issued no invitation to the fast-approaching men.

"The Iceberg Mountains! Must be the Iceberg Mountains!" exclaimed the Captain, as I stood pointing toward the coast. "They stretch along the whole continent of Guff, you know!" And then, after a momentary pause, "I don't just like the looks of them here. They've never seemed quite so high to me before. We must be far from Xerion—very far. If we were on our proper course, we'd see Dead Bone Desert between the ocean and the mountains."

"Can't we find the desert by cruising along the coast?" I asked.

"We might, but we don't know whether to go north or south," muttered the Captain, sadly. "As it is, the best way may be to cross the mountains and find out what's beyond. Probably we'll come upon some civilized settlement."

"And if not?" I questioned, brutally.

"If not," he acknowledged, with a wry smile, "we'll have some hard times ahead. In order to travel light, you know, we took along only food enough for three days."

Half an hour later we were skimming the highest of the peaks. A piercing cold had seeped in even through the closed windows, and the ship's blankets were not thick enough to keep us warm. Yet, though we shivered and felt light-headed and dizzy from the altitude, we could not take our eyes from the panorama beneath us. As far as we could see, even to the hazy infinity of the remote blue ocean, the glittering crags and summits stood in rows and clusters, most of them capped with an intense glacial white, which sparkled brilliantly in the sunlight; while the lower slopes and the deep-furrowed canyons were blanketed in shadow or dark with unbroken vegetation.

Range after range passed beneath us in wide successive ranks that seemed interminable. Rapidly as we were traveling, it was hours before the crags began to dwindle, and through rifts in the mountains we had glimpses of a far-flung and apparently endless valley. Toward this we glided at prodigious speed, the motors hissing and buzzing unbearably with their unwonted activity. But when at length the plain stared beneath us and our velocity had slackened, we had little cause to be thankful. For the land below was white, white as the glaring snow-peaks, white with the ghastliness of utter desolation! Not a weed, not a blade of grass, sprouted on those flat, salty wastes; not a moving thing disturbed the tomb-like solitude. From the base of the rocky foothills the desert stretched toward infinity, its outlines apparently those of some ancient sea whose receding waters had deposited their salt in grewsome memorial.

"Where under heaven are we?" I demanded, as

I sought the Captain and pointed down to that blinding waste of alkali and sand. But the Captain, who was anxiously pacing the floor of his tiny cabin, did not at first deign to answer. I had to repeat my question before he looked up with an abstracted air, shook his head sadly, and confessed, "Wish that I knew! Wish that I knew! Never in my life saw such a place before!"

"But haven't you any idea?" I persisted.

"Yes, I have," he confessed, gravely. "I have. Only, I hope the idea's all wrong. Haven't you ever heard of Sepulchre Valley?"

"Why, yes, I suppose——" I began, embarrassed, not wishing to admit my geographical ignorance.

"Of course you've heard of it! Every one has! Occupies a million square miles in the heart of the continent. More good men have been lost there than anywhere else on the planet!"

"Well, at any rate, we don't have to cross it, do we?"

"Maybe not, but what else can we do? The nearest civilized settlement is thousands of miles away. And I wouldn't have the least idea how to reach it."

I pondered a moment, but that glaring, salty waste still was not reassuring.

"We'll have to take a chance, that's all," I finally decided. "Instead of continuing due east, suppose we turn southward."

"Oh, very well," agreed the Captain, with a shrug. "I suppose one way is as bad as another."

But despite the Captain's pessimism, the aspect of the country began to improve soon after our change of course. The level white plain gradually gave place to low and rolling hills covered with a scraggy brown vegetation, and these in turn—after an hour or two—were succeeded by stretches of grass-land varied by dense thickets and woods. "I think that we must be getting down toward the land of the Poison Darts," stated the Captain, dolefully, when I questioned him as to these regions. "They're a race, you know, of gray-skinned savages occupying a vast stretch of territory south of Sepulchre Valley. The most cunning and treacherous barbarians on the planet."

IT was at this point that we discovered the first sign of human proximity. Just below us, in the open spaces near the woods, we could observe several clusters of mud-colored things that were apparently huts. And among these dwellings we distinguished swarms of slow-moving ant-like points—apparently the gray-skins themselves! Through a field-glass which the Captain lent me, I gazed at them curiously; and I could see them clearly enough to note that they were moving about in great agitation, with slender arms pointed excitedly upward.

Just then we found cause for excitement on our own account. A member of the crew, his face grimy and his thin hands reeking of oil, came plunging into the cabin, half out of breath. "The valves!" he gasped. "The valves! They're—they're——"

"Out of order again!" burst forth the Captain. "By the holy gods, can't you——"

"We can't do anything! They're all clogged up! If we don't watch out, the engines'll burst!"

The Captain flung out a bit of profanity which my limited knowledge of the language did not enable me to follow. After which, the pallor of fear began to replace the red of anger on his face, and he commanded, "Have the engines stopped! See that we come down at once! Hurry, for the gods' sake, hurry, if you don't want to be blown to infinity!"

"Is it that serious?" I began, as the deckhand darted out.

"More serious than that!" mumbled the Captain. "Much more serious!" And then, after a moment, "But we'll fix things up in half an hour, if those gray devils don't fry us alive before then!"

As I did not relish the prospect of being fried alive, I watched with misgivings as the vessel sank rapidly down to rest. So precipitous was our descent that the crew seemed scarcely able to guide the ship; and I noticed in alarm that we seemed headed directly for one of the villages, and were in danger of landing on the roofs. The gray-skins, too, appeared to appreciate that possibility, for their terrified gestures and excited scurryings were plainly visible. But evidently they did not care to wait and watch us alight, for when we grounded not one of them was to be seen, though their cries still rang from the woods like the calls of frightened beasts.

By a final skillful bit of maneuvering, we managed to avoid most of the buildings, and did no greater harm than to take down the walls and roof of one of the tiny clay huts. But, as if by deliberate design, we had come down in the heart of the town. Several scores of rude little dwellings were clustered about us in a circle, with dirty brown, windowless, earthen walls, and doorways that reminded me of the entrances to rabbit burrows. Beyond the village, to our right, stretched flat, yellowish green fields, while on the left the limbs of palm-like trees, with leaves like gigantic white feathers, waved just above the house-tops.

But these details had no immediate interest for us. What did interest us was that which lay spread before us on the ground. The gray-skins could not have prepared more thoughtfully for our coming—great heaps of some appetizing-looking fruit, shaped like a watermelon and brilliant yellow in hue, lay stacked in the open space between the houses. Near these were quantities of a hard, red nut, twice as large as a walnut and of a tempting fragrance, while masses of brownish bulbs and roots seemed to offer a sufficiency of vegetables.

It was but a minute before we had broken the day's fast. Never had I tasted more delicious fare; never had the crew dined with greater gusto. The Captain did complain, it is true, about the lack of meat, lamenting that the gray-skins were so barbarous as to eat only fruits and nuts; yet he disposed of the food with as much efficiency as any of us, and incidentally had the foresight to order the surplus deposited in the airship.

So eager were we to satisfy our hunger that for the moment we forgot that the dirigible was in need of repairs—forgot that the Poison Darts were the most dangerous savages on the planet. It was not long, however, before we were reminded of those facts. I was just remarking to Daolgi that the watermelon-shaped fruit was now a favorite of mine, when my attention was attracted by a pair of greenish eyes peering furtively out of the shrubbery.

"Look!" I cried to Daolgi. But the eyes had already flashed away. The poet had just commended me on my imagination, when a long, pointed stone came hurtling along the ground, missing him by a fraction of an inch. This was followed by another, equally well aimed; and while we stood staring to see the invisible assailant we found ourselves suddenly left all alone.

The blue-skins, panic-stricken, had sought safety in the airship!

"Run! Run! Run! The stones are poisoned! Quick! Run!" the Captain called to us from his sheltered retreat, much as one might call to a child too stupid to get off the car tracks.

But we were not to be daunted by his words. As we stood watching, the enemy shot into view—a score of sparsely clad, stooping pygmies, scarcely more than

four feet tall and with skins of the color of granite. Screeching like wildcats, they wielded little sling-like devices by means of which they hurled stones at us in showers. The poet and I had to be quick indeed to avoid the onslaught; but we were determined not to retreat; and, seizing the little round nuts as ammunition, we returned the fire with all our strength.

It was Daolgi that discharged the first shot. So inaccurately did he take aim that the Poison Darts paused in their attack, and shook and crackled with laughter. Resolved to redeem this poor exhibition of marksmanship, I began hurling nuts on my own behalf, and would have scored several hits, had not the gray-skins dodged with great agility. Daolgi now returned to the attack, but with no effect except to knock holes in several clay huts; on which the natives, indignant, began to advance in dense masses, and discharged their poison missiles so thickly that we had to turn and race back to the dirigible.

Dashing through the open door, we found the blue-skins in a fever of excitement. The entire crew was bustling about amid the machinery in frantic, sweaty haste, while the Captain stood above them roaring out orders that no one appeared to heed. Every few seconds someone would glance up to note the movements of the gray-skins, and would return to his work with a cry of terror. And meanwhile the stones rattled and banged in an incessant rain against the vessel's steel framework.

Slowly, foot by foot, the enemy crowded closer, hedging us in all sides, not by the scores now but by the hundreds. Their faces, painted a gory red, seemed to be leering like the masques of devils; their tiny greenish eyes shone with malevolent feline light; their voices were like the howls of wild beasts as they screeched and screamed their menace, twisting their long arms above their heads with fantastic gestures, dancing high in air with a fiendish, triumphant rhythm, yet never pausing in the discharge of the little poisoned stones they carried in bags fastened to their sides.

At last the assailants were within ten yards of the airship. Then abruptly the rain of missiles ceased. Clustering together in mass formation and shrieking and howling hideously, the gray-skins prepared for the final attack. I closed my eyes in horror; the wailing and roaring of the savages rose in pitch and volume; I expected at any moment to hear the death-cries of their victims. Then, while I sat shuddering speechlessly, there came a familiar sound—the difficult chugging of a motor as it warmed into action. Simultaneously, another sound burst forth—shouts of amazement and terror, the clamor of a panic-stricken multitude. Rapidly that sound retreated; and when I opened my eyes and glanced out of the window, I saw the last of the gray-skins disappearing in the woods.

A few minutes later, having demolished three or four more houses in our hasty efforts to get started, we had bidden farewell to the land of the Poison Darts.

CHAPTER XX

The Land of the Giants

AFTER an hour's ride from the country of the gray-skins, we found ourselves above a long blue lake that bent and twisted sinuously among the folds of green and wooded hills. To Daolgi and me this sheet of water was interesting merely as a bit of scenery in a continuous panorama; but to the blue-skins it possessed quite a different interest. In some way that we could not at first understand, it seemed to be cause for rejoicing, for the Captain came dashing exultantly into our room, and exclaimed, after the manner of one who announces some glorious discovery, "That's Lake Uwalda! Lake Uwalda!"

But for Daolgi and me this fact had no meaning. "We had presumed it was some lake or other," observed the poet, with his politest sarcasm.

"But don't you see?" cried the Captain, darting a contemptuous glance at Daolgi. "Now I know where we are! I know where we are! Many's the time I've flown to Lake Uwalda, selling guns and civilizing the natives."

"The question is," I said, "do you know how to get from here to Xerion?"

"Why, of course, I do! Of course! Haven't I made the trip often enough? The Bambohghu River, which is the outlet of this lake, flows from here through the Azzlo Valley straight across the border into Xerion. All we have to do is to turn and follow the river!"

"About how far is it?" I queried.

"Oh, not very far. Not very far at all. About a thousand miles, I should say." Whereat the Captain left to order our course reversed, for we had been flying directly away from Xerion.

Needless to say, Daolgi and I were excited to think that we were at last within reaching distance of our goal. Would we discover the white-skinned giants, and find some trace of our lost fellows? Or would we search for them all in vain? Eagerly we debated the prospects as the dirigible sped above the long tortuous reaches of the Bambohghu River; and more than once the names of Sani Par, Raii Lordo and Ardu Twell passed our lips in expectation not unmixed with foreboding.

By evening we had covered more than half the distance. Sunset was already reddening the western clouds when we beheld the first evidence of human life since our escape from the Poison Darts. Huddled in an open plain, where the river was joined by a tributary, we observed six or seven hexagonal iron buildings that seemed the exact duplicates of those we had left at Waschu. "Must be the missionary settlement of Throgram," explained the Captain, rubbing his hands in satisfaction. "Here is where we pass the night."

A few minutes later, when the throbbing of the motors was dying down and we stepped out of the dirigible to the weedy ground, just beneath the iron towers, a score of blue-skins greeted us with hearty cries. They were the strangest-looking Venerians I had yet beheld—somewhat taller than the average, with pole-like bodies and slender, emaciated faces that tapered to a point at the chin. Their eyes wore an odd, contorted expression, which, as I was later informed, was due to their shortsightedness. Their thin lips were blue as their blue faces, and their bloodless arms waved and fluttered nervously as feathers in the wind; while their close-fitting black dresses (the distinctive uniform of their guild) gave them a peculiarly feminine appearance, although, as I was assured, they were of both sexes.

There could be no question as to their pleasure at seeing us. "It isn't every day that we meet travelers from Wultho," they informed us; and they pressed us insistently for news from home. But, above all, they were eager to acquaint us with their excellent work in this wild country. They described with what efforts they had built the iron towers, and so afforded the natives the model of a real city; they depicted their success in introducing "gulgul" into this land, and in making the savages worship it instead of their heathen gods; they stated that they had taught certain of the tribes to dwell underground in the civilized fashion, although a few were still mulishly opposed to this advanced custom; they congratulated themselves upon introducing scientific methods of warfare and slaughter to replace

the inefficient slings and stones of the aborigines; and they confided enthusiastically that they were contemplating the erection of a sawdust mill, where the forests might be put to good use and where the natives might be occupied twelve or fifteen hours a day instead of idling in the woods and living on fruits and nuts according to their shiftless, barbarian habit.

For several hours we listened to the details of these and other reform projects. Meanwhile, as we sat burning and sweltering in the iron compartments, we did not know whether to feel more sorry for the missionaries or for the natives. But since we were sharing their food and accepting their accommodations, we did not feel at liberty to express our true feelings. We merely listened in misery and patience, and at the first opportunity changed the subject. What was uppermost in our minds, of course, was Xerion and the white-skinned giants; and, as soon as our hosts could be maneuvered away from their pious shop-talk, we questioned them on this all-important topic.

But they were surprisingly without information. Only one or two facts could they tell us. An expedition bound for Xerion had passed down the river some time before, equipped with machine guns, poison gas tubes, and all the paraphernalia of modern warfare; but the missionaries were not sure whether or not the adventurers had succeeded. Hunters who occasionally passed upstream bore the rumor, however, that the white-skinned giants were under siege and were rapidly being exterminated; and it was said that already several twelve-foot specimens were being shipped to Wultho as trophies. But nothing of this was definite, and the only effect of these stories was to fill us with increasing desire to reach Xerion.

. . . The enemy shot into view—a score of sparsely clad, stooping pygmies, scarcely four feet tall and with skins of the color of granite. Screeching like wildcats, they wielded little sling-like devices by means of which they hurled stones at us in showers.

AFTER a restless night in the narrow underground cells of the missionaries, we set out at dawn on the final lap of our voyage. The Captain was not anxious to leave so soon, for he said it was not often that we had a chance to sleep between iron walls; but Daolgi and I were too impatient to brook any delay. Our wishes, of course, prevailed, and the sun was barely up before we were twisting and winding above the Bambohghu River; while within two hours the increasing wildness of the country signified that we had crossed the borderline of Xerion.

"It's still a hundred and fifty miles to the really savage districts," the Captain assured us, when we thought our journey was over. "Guess we'll make straight for Rokiyok, the only Wulthonian settlement in all this wilderness."

In spite of this information, Daolgi and I did not believe it could be far to the really savage part of the land. To our inexperienced eyes, the region below us looked savage enough. Straight above the river's edge on both sides shot sheer rocky cliffs or palisades, which gave place to a succession of sharp-cloven and fantastic hills, all of which seemed warped and bent as though by titanic hands. Some tapered into thin, fence-like ridges leaning dangerously awry; some jutted skyward in monstrous cones, steeples and spires; some had great hollows scooped out in their flanks as though by whirlwind or torrent; some were flat-topped with precipitous sides, and some gently sloping except for abrupt, pyramidal crowns. And all alike were mantled with forest, a luxuriant reddish green forest, broken only occasionally by huge boulders or projecting, splintered crags.

For over an hour we sped across this desolate and yet picturesque land, the hills growing constantly more imposing and higher and yet never less grotesque. Then, while we were wondering what evidence of human life was to be found in this green infinity, we observed a little, bare, hexagonal clearing in a valley far below. Toward this the dirigible rapidly glided; and within a few minutes we could make out the forms of six-sided iron towers clustered together, according to the invariable pattern of the blue-skins.

Another minute, and we were on a level with the roofs of the buildings. I was just remarking to Daolgi that probably this was another missionary settlement, when, with a thud, the airplane struck the ground, and I observed a dozen curious bluish faces staring in at us through the ports. One glance told me that they were not the faces of missionaries: the cheeks were not thin enough; the eyes not sufficiently contorted, and, to my unpracticed gaze, the strangers seemed merely average blue-skins.

"Welcome to Rokiyok!" they cried, with an evident attempt to be cordial. But I noticed that they were looking at Daolgi and me with undisguised wonder and possibly even with a trace of suspicion.

In a few, well-chosen words the Captain explained the purpose of our visit. And in a few words equally well chosen, they replied that he had shown wisdom in coming to Rokiyok, since, as the settlement nearest to the white giants, it was naturally the headquarters of the explorers. Several of those present were, in fact, members of the expedition from Wultho, and would be pleased to offer us any information or assistance.

But in the beginning we were to be the givers rather than the recipients of information. While the Captain and crew busied themselves in repolishing the airship and in making a few necessary repairs, Daolgi and I were escorted to the Municipal Reception Room in the Fourth Basement; and there, after being offered seats on the sawdust-sprinkled floor, we underwent an annoying questionnaire. What was our race, religion, sex, and native language? And from what little known part of the planet did we come? Our hosts were particularly anxious for information, since they had made a singular observation: our eyes and skin were similar in color to those of the savages they were hunting. We should not be insulted, however, at this seeming comparison, for the coincidence could have no real importance: we were mere pygmies by the side of the white Titans, and bore no resemblance to them in build, dress, manners or ferocity.

Exchanging significant glances, Daolgi and I agreed that the coincidence was an odd one. To both of us simultaneously had come the conviction that some of our fellows dwelt among the barbarian giants. We were, therefore, more impatient than ever for news of the war against these creatures, and were keenly disappointed when our hosts appeared to have little to tell us. They had seen almost nothing of the white giants except at a great distance, they reported—and this despite the fact that those wary beings made their lairs in the woods not half a dozen miles away. Although their campaign had been in progress for several weeks, they had secured not one specimen of the giants either dead or alive. But they were confident that many had been struck by their bullets and had gone off to die among the bushes. Besides, they had obtained several interesting trophies, of which one in particular was of great intrinsic value.

Eagerly we asked to see this valuable trophy. But only after much hesitation and a long, whispered conference did the blue-skins grant our request. From the furtive glances they cast at us, it appeared that they had doubts as to the safety of their treasure in our hands. And had it not been for a liberal gift of 'gulgul," all our persuasiveness would not have availed.

But finally, after an hour's debate, two of the blue-skins went to secure the trophy from the safety vaults. It was many minutes before they returned, and when at last they reappeared we were as much in suspense as ever. For what they carried was a little iron box, which had to be opened with many turnings of keys and locks; and in it was another box, which likewise had to be opened with many turnings of keys and locks; and the second box contained an amorphous object bound in delicate white cloth. While we sat shivering with excitement, the object was unwrapped tenderly and slowly, to display—a pair of yellow goggles!

YET for both Daolgi and me those goggles were extraordinarily interesting. They were wide-rimmed, wider than any Venerian could use, and were of a style we had often seen on earth!

"You observe, these are most valuable," one of the blue-skins explained, noting our eagerness. "Ordinary yellow glass, of course, isn't worth so much, but this particular shade is rare, very rare—worth almost half as much as 'gulgul.' This will easily pay the expenses of our expedition."

But the thoughts that coursed through my mind had nothing to do with the value of yellow glass. "How can you get to where the giants are?" I exclaimed. "How——"

"You can't get there at all," the blue-skin informed me, glancing at his watch—or, rather, at the thermometer-like machine that served as a watch on Venus. "At least, you can't get there after today. In two more hours, none of the giants will be alive."

"What do you mean?" I demanded.

"Just what I said. We're making use of a new invention—we have bombs planted among the dens of the giants, and have them timed so that an electric charge will explode them two hours from now. The best of it is that poison fumes from the explosion wil.

kill all those not slain directly by the bombs. Clever invention, isn't it?"

And the blue-skin delivered himself a congratulatory slap on the knee, and laughed and crackled uproariously.

"But, God in heaven, you can't do this!" I burst forth, springing to my feet, and seizing him by the shoulders till his slender frame shook like limp rags in my grasp. "You can't! It's murder! You'll have to have it stopped!"

"Stopped?" The blue-skins were staring at me as though convinced of my insanity. "Do you think that after coming eight thousand miles for specimens, we're going to stop now?"

"But you can't wipe out the whole tribe!" I raved, relaxing my useless grip on my victim, who made haste to put a long distance between us. "Think who may be there! Human beings like ourselves! Human——"

But a storm of crackling laughter drowned out my words. "He thinks the white giants are human beings!" cried one of the boldest blue-skins, in mocking merriment. "He thinks they're human beings!"

And they all shook and chuckled uncontrollably.

Obviously, to argue was useless. Choking down my anger, I demanded, for a second time, "How can you get to where the giants are?"

The effect of this simple question was to send my hearers off into new convulsions. "I tell you, it's no use going to the lair of the giants," one of the more obliging informed me, after the tumult had subsided. "If we weren't going to blow them up, they'd gobble you alive!"

In rising anger I repeated my question—repeated it fruitlessly time after time. Finally, when all else appeared unavailing, it occurred to me to offer a bit of "gulgul." And instantly all my hearers were clamorous to give me the desired information. "Just travel up the rivulet flowing back of the town," they suggested in chorus, "and you can't miss the white monsters."

Casting several fragments of green glass to my informers, I turned toward the door. "Come," said I to Daolgi. And, followed by him and Yap Yap, I hurried away while the blue-skins were wrangling over the "gulgul."

"There's only one chance," I whispered, once we were in the open. "We must get there and warn them in less than two hours. We've not a minute to waste."

Daolgi nodded assent, and together we sought the rivulet, which we found with ease. It was a tributary of the Bambohghu, and its tiny thread of water skirted the town, flowing out of a gorge between two jutting, densely wooded hills. We could have wished that it had chosen a course through less wild and tangled country; yet, remembering the urgent necessity that called us, we could not hesitate, but plunged forthwith into the darkness of the canyon.

And forthwith our troubles began. There was no path or trail to guide us; the leafy screen above was unbroken, and the gloom like that of late twilight; the undergrowth was bristly and dense and checked our every footstep; great boulders loomed on our path, and fallen tree-trunks barred our way; the fear of serpents and wild beasts were in our minds, and the even greater fear of being lost. . . .

"Two hours!" I kept repeating to Daolgi, to warm his flagging spirits and my own. "Two hours! Less than two hours left!" And through that terrible wilderness we stumbled with drawn faces and staring eyes, sometimes keeping to the rivulet's brink, sometimes wading through the water, when the banks seemed impassable, sometimes losing sight of the stream amid veils and draperies of vines. Our feet began to ache from treading on pebbles and sharp rocks; our hands and faces burnt from contact with the reed-like, corrosive shrubbery; our clothes were slashed by thorns, and our arms and legs smarted from the pricks of innumerable nettles; we grew weary from constant warfare with the great buzzing spider-like insects. Yet worse than all our bodily sufferings was our mental torment—our terror at the thought that probably we would be too late.

And still we dragged our way through the interminable windings of the canyon, occasionally spurring ourselves on by consulting our watches. But always we noted the time in despair. What progress were we making? We were only sure that we were not making progress enough. When an hour had passed, we had covered not more than two miles; and we knew that we had three or four miles more ahead. And in less than another hour our white friends would perhaps have breathed their last!

Drenched with sweat from the terrible heat, we pressed on in silence. Except for an occasional cool draught from the stream, we did not allow ourselves to lose a second; and even the occasional mutterings, rustlings and grumblings from the heart of the woods had no power to deter us. Once Yap Yap, catching some sinister scent, lay cowering before us and had to be carried for many yards; once a low cliff, over which the stream poured torrentially, momentarily blocked us before we scaled it on our hands and knees; frequently we were stopped by creepers which, with spring-like, automatic motions, wrapped themselves about our legs and spurted burning, acid sap. But despite all our exertions, we at length realized that our efforts were useless.

The final hour had dwindled to forty minutes, the forty to thirty, and the thirty to twenty. Gladly I would have flung myself down by the stream and sought momentary rest—but there was to be no rest for me. Daolgi, meanwhile, was even more exhausted than I; his long, flanky frame dropped far forward, his tongue hung thirstily from his mouth—his breath came by short spurts and gasps. Clearly, if there were still to be any hope, I must press onward alone.

The poet had little energy to protest when I announced this plan. Not waiting for his assent, I hastened ahead through the woods, leaving him to follow as best he could. I still kept close to the stream, skirmishing amid the hostile underbrush; and in a few minutes I observed, just ahead, a patch of light indicating a break in the woods. Toward this I made rapidly, and soon came to the edge of a clearing wavy with some wheat-like grain. It was rectangular in shape, and was cut with geometrical precision in the heart of the woods!

At any other time I might have wondered what savage race had cultivated this land, for I knew that the blue-skins did most things by hexagons. But I had no time for reflection. Still keeping the stream in view, I started across the fields as rapidly as my wearied condition would permit. Yet I was so weakened by the day's ordeal that it took me seven minutes to cover the half mile to the opposite fringe of the woods.

Reaching the forest, I paused for a dismayed glance at my watch. And, with a sinking of the heart, I realized that I had failed! The time was up!—the fatal explosion should occur at any minute!

As I stood there at the base of the great reddish trees, cursing the misfortune that had made me too late, there came a rapid rustling from the underbrush. Startled, I turned to look—a pair of blue eyes was staring at me from amid the leafage!

"Where under heaven do you come from?" boomed a husky voice. And, in my amazement, it did not occur to me that I was listening to my native speech!

Then, out of the tangle of bushes, there stepped a straw-clad figure with many years' growth of beard. His skin was white, and his features were those of an earth-man!

CHAPTER XXI

Some Further Riddles Solved

"BY the lucky stars! I didn't know there were any more of us on Venus!" exclaimed the stranger, with emotion, as he reached for my hand and shook it in a never-ending grip.

But, overjoyed as I was to see him, I could not forget my message. "I have something to tell you, something very important——" I started to sputter, then broke short, unable to find words to equal the occasion.

"Yes, what is it?" asked the straw-clad one, surprised, but not at all alarmed. "Guess you'll have a world of things to speak of——"

"Oh, but this can't wait—not one minute, not one minute!" I interrupted, incoherently. "You're in danger—great danger——"

"Danger?" queried the other, without any trace of anxiety. "How so?"

"The blue-skins! They've planted mines! They're going to explode——"

"Oh, no, they're not," came the reply, with surprising calm. "We broke the electrical connections hours ago."

At these words something within me seemed to snap. Released thus suddenly from the tension of hours, I felt a dizziness overcoming me; my limbs began to waver and sag; the world seemed somehow to slip from my grasp. Confused and only cloudily aware of myself, I seemed to feel strong hands guiding me to a soft couch; I seemed to hear voices in a continuous blur of conversation; I seemed to be fanned by refreshing cool breezes. How long I remained in that condition I do not know—probably it was but a minute before I began gradually to recover. But at length I opened my eyes without knowing fully where I had been or what I had been doing—and found myself lying on a bed of dead leaves, the forest arching above me, and four pairs of blue eyes staring at me curiously.

In a glance, I recognized the bearded faces of four white men. All, like my acquaintances of a few moments before, were oddly clad in straw; all were of powerful and athletic build; and their high and broad-brimmed straw hats, their long, untended hair, and the great lithe clubs they carried, gave them the appearance of wild men of the woods.

Still, they kept peering at me in undisguised wonder. And still, with a vague sense of recognition, I peered at them, until gradually, as my senses cleared, that vague recognition became definite indeed.

"Alton Dar!" I exclaimed, noting the long, hooked nose, the high narrow forehead and jutting chin of one who had set out for Venus seven years before. And, staggering to my feet, I seized the hand of my old acquaintance, and shook it as vigorously as my weakened condition would permit.

Long and intently Alton Dar stared at me. "Erom Reve!" he cried at length, clapping me about the shoulder by way of comradely greeting. "Erom Reve! I didn't know you at first! Heavens, how you've changed!"

"You, too, have changed," I observed, indicating his straw garments: whereupon they all laughed heartily.

"Here, let me introduce you to these gentlemen," said Alton Dar, as soon as the laughter had died down. And the next moment I found myself shaking hands with Faldon Jan, Anton Dar's companion in the sixth of the missing expeditions to Venus. Then, turning from Faldon Jan, I exchanged greetings with Drayon Trop, who had been reported lost more than twenty-five years before! And, while I marveled and rejoiced at seeing these men, long mourned as dead, there came an even greater surprise, "Raii Lordo!" announced Alton Dar, pointing to the man I had first encountered. And I could scarcely realize that I stood face to face with Sani Par's comrade in the first of all world-to-world flights!

"But Sani Par? Where is he?" I inquired, as I shook hands for the second time with Raii Lordo.

"Why, with the others," was the reply. "Just now he's——"

But before Lordo could finish or I could ask who the others were, there arrived the real surprise of the day.

A rustling in the bushes just to my rear suddenly distracted our attention. Turning eagerly about, I observed a woman's straw-clad form emerging from the bushes. Of her features I could catch but a glimpse before the overhanging leaves hid her momentarily—but that glimpse showed me the dark sparkling eyes of Ardu Twell!

I do not know whether I spoke her name, though I have vague memories of uttering it with an intensity that betrayed the emotions of years. I do know, however, that I stood there with heart palpitating violently, while my head whirled with mad, uncontrollable joy. It was but a moment before she appeared again from behind a bend in the shrubbery, but in that moment I had lived eternities of suspense and longing. Then, trembling visibly, I advanced to meet her—only to be dealt still another surprise.

"Why, Erom Reve, is it you?" she exclaimed, with the most careless calmness. And she offered her hand in the same matter-of-fact manner as if we had met but yesterday. "I didn't know you were living on this planet!"

"I didn't know you were living anywhere!" I cried. And, forgetful of the four spectators, and scornful of the proffered hand, I seized her in a long, vivid embrace.

A moment later, upon releasing her, I noticed that her eyes were lustrous and her pallid face wet with tears.

But she was to prove no less fickle than of old. Perhaps it was that she noted the peculiar twinkle in the eyes of the watching men, or perhaps it was merely that she wished to issue her Declaration of Independence. "Erom Reve," she cried, sudden indignation blazing in her dark eyes, "I don't know what right you had to do that!"

"But, Ardu——" I started to protest, surprised and taken aback.

"Don't 'Ardu' me!" she flamed, with waxing anger. "You don't think you own me, do you? Cave man tactics don't go now-a-days—not even on Venus!"

And with that she turned her back abruptly upon me, and began to fumble about among the bushes as though she had some important business on hand.

Had she acted in this manner at any other time, I should certainly have left her in high umbrage. But it was unthinkable that this should be my reception after all the years of waiting! "Now, Ardu, please!" I pleaded. "Really, Ardu, I——"

BUT I could get no further. A familiar barking to my rear caused me to wheel about abruptly. And, simultaneously, it urged Ardu and the four men to wheel about, wide-eyed with amazement to hear a canine voice after years on a dogless planet. While they stood staring speechlessly, Yap Yap pranced gaily into view, and, seeing the five strangers, he acted with singular disregard for the niceties of the occasion. Not

a hint of welcome was there in his tones, but there was only defiance as he leapt snarling and growling toward the straw-clad ones. Of course, finding that he did not strike terror into their hearts, he speedily retreated; but he was still letting himself be heard at a safe distance, when Daolgi, apparently in the last stages of exhaustion, came staggering on to the scene from amid the shrubbery.

Yap Yap was now temporarily forgotten amid the tempest of excited ejaculations, greetings and explanations that attended the poet's arrival. Ardu and the four men seemed to know no limit to their enthusiasm at discovering that there was another of their fellow beings on the planet; and for some minutes he was the center of a buzzing activity that would have done honor to a king. Worn out as he was, he had to recline on a sofa of dead leaves before he could do much talking; but, under the stimulus of such enthusiastic interest, he was remarkably quick about recovering.

With a sinking sensation I noted that Ardu—though she had known Daolgi only casually on earth—was particularly effusive in her expressions of welcome. She seemed extraordinarily solicitous in inquiring about his health, and went to unnecessary pains to see that he was comfortable; and after the interest of the others had begun to wane, she seemed bent on monopolizing him—or, rather, on letting him monopolize her. Drawing him into a little secluded corner, she launched forth upon a conversation that seemed interminable. I could not but observe the gusto with which she spoke and the occasional smiles that flashed between them; and, for some unaccountable reason, I began to feel indignant at Daolgi, almost as though he had meanly betrayed me.

Fortunately, however, other interests forced themselves upon me. I was sufficiently occupied in describing to the four men our experiences on Venus—and in listening to tales of their own still more exciting adventures. Mysteries that for years had appeared insoluble were suddenly solved, and I found myself absorbed in one of the most fascinating recitations I have ever been privileged to hear.

It was Raii Lordo that did most of the narrating—and a rare narrator he made, as he sat ruminatingly before us, the dominating figure of the group, his eyes a-glitter with enthusiasm, his grizzled hair and long graying beard giving him an almost patriarchal dignity, while his outlandish garb of frayed and ill-fitting straw lent something savage and almost ferocious to his aspect. Unfortunately, Lordo's story is too long to be reproduced word for word, even if I could recapture its thrilling spirit and sparkling flow; and so I will have to content myself with stating baldly the main facts of the tale.

Although in due time Lordo was to answer all the questions that thronged through my mind, he began with a purely personal narrative that dated back some twenty-eight or twenty-nine years. He told first of all of the original world-to-world expedition, in which he and Sani Par had played their gallant part; he recounted how, like us, they had been imperiled by the meteor swarms, and in their hasty departure from the projectile had had no chance to communicate with the earth or save the radio instrument. Alighting in Xerion, not far from where we were now, they had supported themselves for several years like savages, dwelling in improvised huts and subsisting on fruits and nuts, since all the world within their observation was hopelessly barbarous. Meanwhile they kept busy with plans and experiments for telegraphic communication with the earth. But so meager was their equipment that success seemed impossible; and it was only after five years that a passing airplane, wrecked by a storm, gave them the necessary wire and metal at the same time that it suggested to them that not all the inhabitants of the planet were so primitive as they had imagined.

The success of their wireless apparatus was instantaneous. While not powerful enough to flash a signal to the earth, it succeeded almost immediately in catching messages in a known code. And suddenly it came to the castaways that some of their fellow men were on Venus! What was more important, they could be communicated with, for they, too, were trying to speak with the earth! Eagerly Par and Lordo sent out the tidings of their presence, and to their great joy received an instant answer—Kum Linney and Drayon Trop had recently arrived from the earth! And they had arrived uninjured, and with equipment unimpaired! Yet their expedition, too, had failed—they had found it impossible to reach the earth by radio or wireless telegraph, since scientists had evidently underestimated the resistance to ether waves of the Venerian atmosphere.

The story of how Kum Linney and Drayon Trop came to join their two fellow men might itself take up a chapter. At first, of course, they had no way of telling how far apart they were or how to reach one another. But, by careful observations and calculations, Lordo and Par found that they were in Northern Latitude 35, whereas Linney and Trop were in Southern Latitude 18. Their distance in longitude was less difficult to determine, since it was only necessary for both parties to note simultaneously the position of the sun and to measure the difference between their results. By this method they ascertained that not more than five degrees of longitude separated them, and they therefore concluded that they were probably on the same continent although thousands of miles apart. Lordo and Par thereupon offered to try to cross the intervening distance, but Linney and Trop insisted on doing the traveling instead, pleading that their region, besides being almost unbearably torrid, was fetid with tropical swamps and forests. Lordo and Par could not but concede the point, even though their own district was too hot for comfort. And after about six months of cross-country adventuring, during which time the two groups kept in constant wireless communication and Linney and Trop survived innumerable hardships and perils, there occurred the most joyous reunion in the history of Venus.

All this time Lordo and Par had been wishing to see a little more of the planet, and had been experimenting to construct a simple type of airplane. As yet they had not succeeded, largely for lack of metal; but with the aid of the newcomers they undertook crude mining operations, and began to smelt the iron ore which they dug from the hillsides. The process was slow and laborious, and was attended by many setbacks, false strokes and discouragements; but, largely in order to keep themselves occupied, the four men persisted. And after about three years they contrived to build two airplanes, each capable of transporting two passengers.

In a wholly unexpected way, these machines proved invaluable. One day the wireless instruments, which had not been much in use of late, reported a call in a familiar code. Again some of their fellows had come to Venus! The newcomers were two women, Del Oley and Kenlo Taw! But the messages they sent were not messages of joy—they were in danger, mortally in danger from the blue barbarians, and had been signalling in the forlorn hope that some of the earlier explorers would catch their appeal. Although the four men had now been eight years on the planet, this was the first they had heard of the blue-skins; but, while they had no idea what redoubtable giants they were to face, they had not a moment's hesitation about going to the aid of the imperiled women.

HOW Par and Lordo saved Del Oley and Kenlo Taw might easily form the theme of a whole novel of adventure. It will be sufficient to state, however, that they crossed the ocean to Wultho, found the two ladies and brought them to Xerion after weeks of delay and peril; that meanwhile one of the women had been captured by the blue-skins, and placed in a museum of freaks, from which she escaped (numerous sketches of her having been made in the interval); that, before finding Oley and Taw, the two men had had one or two personal encounters with the blue-skins, and on one occasion had waged a desperate battle by the bank of a river, using their penknives as their only weapons and yet slaying their foes with these apparently feeble implements. The women meanwhile had been hiding in caves, their only refuge against searching parties; and to these caves the rescuers were guided by wireless, arriving in time to forestall a probably fatal assault.

While flying back to Xerion with their two passengers, Par and Lordo listened eagerly to the women's stories, and learned that their expedition also had been a failure. They, too, had been compelled to make a hasty departure from their projectile, and subsequently had been unable to signal the earth by radio owing to the unexpected resistance of the Venerian atmosphere.

For fear of the barbarous blue-skins, Par and Lordo decided to do no further wandering about the planet, but to remain quietly in Xerion. The six adventurers now adjusted themselves to a Crusoe-like existence, awaiting hopefully the time (which they knew must arrive) when two more explorers from the earth should alight on Venus. But not for five years did the wireless bring them welcome tidings. And then what happened was virtually a repetition of history. Two more women, Ambo Dolv and Destry Mutral, were sending out messages in the vain attempt to speak with the earth—messages reporting that they had alighted on a barren polar island, and only by a miracle had saved themselves from death in the sea. But they were now in imminent peril— not from the ice and cold, which their years on earth had taught them to endure, but from starvation, since their only food was a straw-like lichen which they dug up scantily from beneath the snow.

Of course, Lordo and Par wasted no time about going to the rescue. And it was not many days before they had made the round trip of ten thousand miles, and the little colony in Xerion had been increased from six to eight.

In the course of the next fifteen years, two more groups of adventurers had been similarly reached by wireless and similarly rescued: first Olton Dar and Faldo Jan, and lastly Ardu Twell and her companion Zara Holque. This meant that twelve of the supposedly lost explorers were now living in Xerion—twelve out of the fourteen that had preceded us to Venus. But what of the other two? Ten years ago a pair of the earth's most promising young scientists—Arad Rune and Lart Bolan—had left on the fifth of the expeditions to Venus, and had never been heard of since. They had replied to none of the wireless messages; no hint of their existence had ever been received. With a sad shake of the head, Lordo declared that undoubtedly they had been lost: had been either blasted by the meteorites, or had fallen into the ocean, or had starved among the deserts or mountains, or had been murdered by the blue barbarians.

Much as I lamented the fate of these two men, I was overjoyed to know that twelve of the explorers had survived. I was now anxious, of course, to learn in what manner these six men and six women had been living during their years of exile, and was particularly eager to meet the seven other members of the colony. Lordo informed me that all seven had gone off that morning on a botanical expedition to Rainbow Valley (which was notable for its wildflowers), but would be back before evening. Meanwhile, he offered to show me their dwelling places. He led me, accordingly, through the woods to a clearing where stood six little straw houses —tiny houses which might have belonged to the lowest of savages! Yet they were neat and well ordered within, were cozy and well ventilated, and were supplied with original lamps and declarations, reed mats and couches, and home-made but not inartistic-looking chairs and tables.

"We spend very little time indoors," explained Lordo, as if in apology. "When we're not cultivating our land we're wandering around among the hills, or making scientific experiments, or simply having a social time out in the open. Or else we're visiting the Granite Faces."

"The Granite Faces? Who are they?"

But before Lordo had had time to reply, a chorus of loud and merry voices distracted our attention. Glancing toward the woods, we beheld half a dozen white men and women emerging. Side by side with them walked four or five gaily chattering gray-skinned pygmies—brothers of the terrible Poison Darts!

CHAPTER XXII

The Village in the Woods

AMID the vociferous excitement that ensued, I was introduced to Sani Par, a thin graying man with long, graying hair and sad, majestic eyes. At the same time, I met Kum Linney, one of the heroes of the second expedition to Venus; and then, in quick succession, I shook hands with Del Oley and Kenlo Taw and the other women explorers. All seemed delighted to see me, and rarely in my life had I received such enthusiastic welcome. Questions regarding myself, regarding the earth and the folks at home, regarding my adventures on Venus, came pouring upon me in torrents; and had not my new acquaintances been informed of the arrival of Daolgi Kar, and rushed off to greet him, there would certainly have been no escape for me for many hours.

All the while I had observed that the gray-skinned pygmies were standing by with wonder on their tiny faces and curiosity in their staring greenish eyes. From time to time they would speak a word to one of the white men or mumble excitedly among themselves, but always in a language I could not understand. The presence of these little natives impressed me as strange indeed, and I took the first opportunity of asking Raii Lordo about them.

"Why, those are the Granite Faces," he explained. "An intelligent and amiable people—once you get to know them."

"Personally, I'm not anxious to know them," I muttered. And I recounted my recent experiences with the Poison Darts.

Lordo's first response was laughter. "To the blue-skins," he said, "they are doubtless the lowest of savages. The blue-skins come to them chiefly as murderers, thieves, kidnappers—and missionaries. Under such encouragement, the Granite Faces don't show themselves very genial. But to us they have proved the best of friends."

"Which means," said I, "that you've been the best of friends to them."

"Well, at least, we've tried to treat them fairly," Lordo admitted. "We've been in touch with them for years, you know. We've learned their language, which is a simple one—and they speak many words of ours. They teach us how to make straw huts and clothing,

how to find our way about the country, and how to get the choicest fruits and nuts. And we teach them what we know about civilization. Would you believe it, they've even learned how to use the wireless?"

"Impossible!" I gasped.

"It's true, just the same. They can both send and receive messages."

"Don't tell me fairy tales!" I cried.

"Oh, there's nothing strange about it. A sort of tele graphic code has long been in use among them for sending short-distance signals by means of sounds and motions——"

"Do you mean they are capable of devising a telegraphic code?"

"No doubt they are capable of it. But this particular code was taught them by travelers from more civilized parts of Xerion. All the inhabitants of this country speak the same language, you see. Now they simply use this old code in the wireless. We often signal them in that way."

I was too astonished to answer. I knew by now that Lordo was quite serious, but I could think of no reply to his amazing statements.

"Do you know," he continued, as if with desire to startle me still more, "the Granite Faces saved our lives some time ago, when the blue-skins were besieging us, and we had to send out for help."

Now in a flash I understood those wireless messages that had puzzled us many months before!

But, apparently unconscious of my astonishment, Lordo blandly proceeded, "You see, we've been having exciting times around here of late. The blue-skins have been hunting us like wild beasts, and it's been taking a lot of ingenuity to keep them back. Of course, they aren't really dangerous—they're too stupid for that, but we have to keep a constant lookout so that they don't take us unawares. Luckily, they're such cowards that one glimpse of us is enough to start them running for a week."

"Oh! So you're the ones they're hunting?" I blurted out, innocently. "How about the white-skinned giants——"

"White-skinned giants!" Lordo slapped his knee with his palm, and laughed and shook uproariously. "White-skinned giants! So we're giants to them, are we?"

"Why, they said they were hunting giants twelve or fifteen feet tall," I explained. "Of course, I never suspected it could be you. They said you had beards down to your ankles, and horns like goats, and would eat your enemies alive. Also——"

But I could get no further. Lordo had again become uproarious. It was minutes before he had halfway subsided, and then at my first question he launched forth into new spasms. . . .

But, when finally he had sobered down a bit, he was at no loss for an explanation. "After all, the tales you heard are not surprising. The Venerians, you see, have not such a strict love of the truth as we have on earth. They do not consider it sinful to overstate—in fact, they have an odd way of saying ten when they mean five, and fifteen when they mean ten, so that it's not strange they described us as ten feet tall. Besides, we must really have looked pretty big to those blue dwarfs, particularly with our tall straw hats——"

"But what about the horns like goats?" I demanded.

"At one time we wore straw hats with long conical points. The blue-skins have imagination—they could easily construe them to be goats' horns." Here Lordo paused, an ironic smile flitting across his face. "Now as for our five-foot beards and our man-eating ways and other exciting qualities—why, those are the very least that are needed to make us appear interesting and terrible. No doubt some day we'll be described as freakish, mythological monsters. Or else pictured as devils in the religious story books."

"Or worshipped as gods," I added; at which Lordo again laughed heartily.

"Well, suppose we join the others," he suggested at length, noting the deepening shadows. I offered no objection; and, after ambling two or three hundred yards along a narrow winding path, we found ourselves in the midst of an excited, chattering group.

I was annoyed to observe that Daolgi was still sitting at one side, exchanging smiles with Ardu Twell, as though they two were all the world. And I was more than annoyed to find that no efforts of mine seemed able to drive them apart. Merely to be congenial, I made some pleasant remark regarding the weather; but Ardu did not appear to hear me, and began to pour out such a stream of words to Daolgi that I turned away utterly routed. For the rest of the day I felt like one who has reached Paradise only to find the gates barred and bolted, and placarded, "No Admittance."

Lordo now suggested that we remain over night, and this invitation the other men enthusiastically seconded. I personally was loath to accept, but the poet signified his willingness in such positive terms that it would have seemed ungracious of me to refuse. I did make some feeble protest, it is true, that we would be missed at Rokiyok; but Daolgi pointed out that the Captain and his men were under instructions to remain there until we returned, so that an extra day could scarcely matter. Reluctantly I conceded the point; and after two or three of the women had excused themselves to prepare the evening meal, it was arranged that I should pass the night with Lordo and Sani Par while Daolgi should stay with Linney and Trop.

THAT evening, as we all sat before a blazing campfire in an open space behind the houses, I ventured an important proposal. Although I was not in the best of moods (Daolgi was still monopolizing Ardu Twell), I was forced to forget my emotions and coldly to discuss a project I had been deliberating on for the past few hours.

I began by describing the prominence which Daolgi and I had attained in Wultho. The story of how we had manufactured "gulgul" provoked many a laugh; and there were numerous titters when I related how we had made ourselves owners of Waschu. But the real surprise came when, having made my hearers understand how powerful we had grown, I suggested that they accompany us back to Wultho and share in the fruits of our success.

To say that my words created a furor would be to understate things. The entire company literally went mad with excitement; they were clamorous with their questions, profuse with their congratulations and thanks. Yet at first it was not certain that they would accept. Some were eager, almost greedy to go; others, more conservative, no longer wished to exchange known comforts for unknown perils; a majority were lured by the thought of adventure and change, but a majority, likewise, had grown attached to Xerion, its friendly natives and its picturesque wilderness. For several hours we debated and argued, but to no avail. Then, when it seemed impossible to make our friends accept my offer in full, I suggested that they at least pay me a visit, using their own option as to whether that visit should become permanent. To this they had less objection; but, even so, there were some who could be convinced only by long and wearying argument.

But finally they had all agreed—all, that is, except one. And that one was to my mind the most important of all—the self-willed Ardu. Stanchly she maintained

she saw no reason to leave the Paradise of Xerion, even temporarily for the iron cities of the blue barbarians. Argue with her as I might, she remained obdurate. My pleas seemed only to strengthen her resistance; she would answer me merely with an occasional stubborn "No!" And an hour of vain entreaty convinced me that thanks to her obstinacy, all my plans would be wrecked.

But, at the crucial moment, Daolgi came to the rescue. Until I was at the very point of despair, he had taken no part in the argument; then, turning to Ardu with an ingratiating smile, he suggested, inanely, "Really, Miss Twell, I think you should come. It will be so much nicer for us all."

And, with a smile equally ingratiating, she beamed upon him, and murmured, "Oh, of course, Mr. Kar. Of course, if you wish it, I will come."

But, somehow, it seemed to me that all the sweetness had been taken out of her consent.

CHAPTER XXIII

The Giants Invade Rokiyok

ON the following morning Daolgi and I left together for Rokiyok. We realized that it would be unwise to bring our white friends there without first warning the blue-skins; we also realized that the Captain and his crew must be given orders to receive twelve extra passengers. Having instructed him to arrange for our departure at the earliest opportunity, we were to return to the white settlement and assist our prospective guests in the preparations for leaving.

It took us three hours to cover the distance to town. Since we had no reason to hurry, we managed to escape most of the irritations we had previously suffered. But a fresh irritation had risen—an irritation less physical than of the mind: Daolgi and I seemed somehow to regard each other with coldness. There was no open breach, yet we addressed not half a dozen words to one another during the entire three hours; and I am not sure but that the fault was mine, for a slow anger was burning within me, and I was still smarting under the verbal blows dealt me by Ardu Twell.

When at length we had emerged from the wooded canyon before the iron walls of Rokiyok, we heard a sudden high-pitched tumultuous shout, and had an impulse to flee back into the forest. But we held our ground and discovered that the shout was meant in welcome rather than defiance. It was not a minute before the townspeople came swarming toward us, among them the Captain and his crew. They were all clearly delighted to see us, though not a little surprised; and they cried and crackled in such a shrill chorus of greeting and rejoicing that at first we could not make out the reason for their excitement.

"Why all this flurry?" I at length managed to ask. "We've been gone only a day."

"We thought you were gone forever," the Captain solemnly explained. "Some one said he saw you going toward the lair of the white giants. He said you had been splintered beneath their teeth."

When I assured the Captain that no such fate had befallen me, that worthy blue-skin seemed much relieved. But he said I must be extraordinarily brave to entrust myself unarmed to a giant-infested jungle, and suggested that I be less reckless next time and provide myself with a bodyguard and machine-guns.

"But that will not be necessary," I replied, conceiving a daring fabrication. "The white-skinned giants can do no further harm."

"What!" gasped half a dozen of my hearers. "You haven't killed them, have you?"

"Not exactly," said I, inwardly smiling. "I have merely hypnotized them."

"Hypnotized them?"

"Yes, hypnotized them. My friend 'Large D Large K' "—here I designated Daolgi—"has assisted me in putting them under a spell, so that they no longer have any will of their own, but must speak and act exactly as we direct. We can lead them around now like tame parrots or monkeys."

But my audience would not at first believe me. They doubted that the giants could be hypnotized. Many, indeed, were convinced by my description of how Daolgi and I had bound the enemy with stout ropes; but a skeptical few seemed to suspect me of falsehood. Finally it became clear that I must confirm my stories by direct evidence. And so I achieved the greatest surprise of all by promising to bring the giants to town on the following day. At this there were many cries of disbelief, several shouts of protest, and more than one murmur of fear; and Daolgi and I had to draw upon all our resources of imagination and oratory to convince the blue-skins that no one would be eaten alive.

Some time later, after the mob had dispersed, I turned to the Captain and inquired when he would be prepared to return to Wultho. He replied that the dirigible was already in cruising condition, since he had not only made all necessary repairs but had rented a compass from the Wulthonian explorers in Rokiyok.

Much pleased at this information, I stated that we should leave at noon the following day—and that we should have twelve extra passengers.

But I encountered unexpected resistance when I mentioned who the passengers were to be. "I haven't had any practice carrying giants," protested the Captain; and fear shone in his tiny black eyes. In order to win his assent, we had first to testify that the giants were much smaller than rumored, and next had to remind him that their transportation in his ship would render him famous. The latter argument—aided by some "gulgul"—seemed to impress him vastly; and it was no doubt this that brought him ultimately to our side.

There was now nothing for Daolgi and me to do, but to return to our white friends and announce that we should leave on the following morning. Still separated by a chilling distance that forbade us to mumble more than an occasional word to one another, the poet and I hastened back across the wilderness to the white settlement, and to our delight found the preparations for the departure already more than half completed.

THE following morning at sunrise the migration began. Carrying all their personal possessions in long reedy sacks, the twelve straw-clad ones accompanied Daolgi and me through the dark wooded canyon to Rokiyok. Progress was slow, for some delay was occasioned by the visit of a hundred Granite Faces, who came laden with gifts to bid their friends farewell; then further delay was caused by the difficulty of carrying the great fruits and nuts, the grass baskets and the ornamented bits of pottery with which the gray-skins had presented us. But in spite of our early start, it was noon before we were in sight of the town.

But what chiefly troubled me was not our rate of traveling. It was that I was still unable to get within speaking distance of Ardu Twell. Daolgi still was conspicuously and shamefully absorbed in her, chattering incessantly and even neglecting his fair share of the burdens. On the one occasion when I found her off guard and sought to start a conversation by wishing her a pleasant trip, she froze me with the most coldly

polite, "Yes, I expect I shall, thank you, Mr. Reve." And for the rest of the walk she strolled along very merrily with Daolgi, even allowing that idiotically sentimental poet to take her arm. I am afraid that it made me just a bit sullen to see what fools they were making of themselves; and I fear I did not prove altogether companionable to Raii Lordo or Sani Par or listen with undistracted attention to their disquisitions on the mineral wealth of Guff or the flora and fauna of Xerion.

Arriving at the outskirts of Rokiyok, I was surprised to find that there was no crowd to greet me as on the day before. Not a person was to be seen; the silence was ominous. "I wonder where all our friends could have gone," I remarked, as much to myself as to anyone. And at that moment I noted a pair of dark eyes peering at us from behind one of the buildings. Simultaneously there was a shriek of terror, and the eyes flashed from view. Then other cries of terror answered from unseen parts of the town; then there was a sound of scampering feet, as the cries continued; then from all directions the people darted into sight, only to disappear, screaming in panic, some into basements, some across the open spaces and into the woods. Many carried guns, which they failed to use, or dropped in their consternation; others sought to discharge the weapons, but trembled so that they could not take aim, and ended by dashing after their comrades into the woods. And among these I recognized several who had come to Xerion to hunt the giants!

Laughing heartily at this mad multitude, we ambled to the open space where the dirigible was anchored. We found the Captain awaiting us, but trembling so that his stick-like legs seemed about to give way beneath him. It took some time to convince him that he was not in mortal peril, and it was many minutes before the pallor had left his face and a normal blueness began to return. But finally, when he had recovered sufficiently to see that the giants were not so terrible as the descriptions of them, he summoned up amazing courage, and began to walk about among the white men as though he had known them all his life.

Until that moment not a member of the crew had been visible. But, upon observing that their Captain was unmolested by the dreadful strangers, the men commenced to creep timidly forth from their places of hiding, one from behind the engines, one from beneath a bench, one from under the cover of a tool chest, one somewhat greasy from lodging in an empty oil barrel, one shivering from recent experience in the refrigerator. Still, they were brave men, and even the great five-and-a-half and six-foot frames of the giants did not frighten them away again. While it was many minutes before they had ceased quivering like feathers, they obeyed the Captain's orders with only an occasional timorous glance toward the straw-clad passengers.

Meanwhile the twelve newcomers, laden with sacks and bags and baskets, followed us slowly into the airship. After a moment we heard the welcome thudding and murmuring of the engines; then, almost immediately, the doors were slammed shut, and we found ourselves rising in air on the eight-thousand-mile voyage back to Waschu.

CHAPTER XXIV

Back to Waschu

THE return trip to Wultho was comparatively uneventful. This time we did not encounter any dangerous storms; we did not break the compass or lose our way; we did not engage in any combats with poison-hurling savages. After heading straight for the Hurricane Ocean, we sailed without interruption across the wide waters of that fickle sea; and the only disturbances were of a personal and secret nature. I must admit, however, that I had little pleasure from the voyage, and that for me the hours did not pass at all tranquilly—my thoughts were too much with a certain young lady whose thoughts did not seem to be at all with me.

Of course, I tried to pay no attention when I saw Daolgi lolling about in the constant company of Ardu Twell and her chum, Zara Holque; and I gave no heed to the insipid smiles, which I saw the poet continually exchanging with his companions. None the less, I did feel a little ashamed that the poet should be behaving like a schoolboy; and, absurdly enough, I was just a trifle disappointed that Ardu appeared to get along so well without my company.

Only one or two stray gleams of consolation came to me during the entire trip. The first was when, while Daolgi was energetically reading his poems to the ladies, I surprised Ardu in the midst of a full-sized yawn. At that time her eyes met mine, and I thought there was an understanding twinkle in them—yet I could not be sure. But an hour or two later, looking up by chance in the midst of a conversation with Sani Par, I found her gaze full upon me, and with an expression that was anything but unkindly. My heart gave a great leap at the sight, and I am afraid that I did not exactly follow what Sani Par was saying. But this was surely absurd of me, for Ardu turned unconcernedly in another direction; and the next moment I heard her remarking to Zara Holque that she had been having a wonderful time watching the sunset.

For the rest of the trip I saw little of Ardu. She never seemed to be on deck when I was there; or, if by chance she was visible, she was invariably involved so deeply in conversation as to be unapproachable. And perhaps that was just as well—for the indignation that was growing upon me did not promise a pleasant encounter should we find ourselves alone together.

Nearly seventy-two hours was consumed in our flight back to Waschu. It was early morning of the third day when at last the Wulthonian shore-line greeted us hazily far to westward. Though we had been away only a little more than a week, it seemed to me that years already separated us from our life at Waschu, and our first distant sight of the iron towers thrilled me with just a little of the exile's pleasure at homecoming.

As the *Eagle of the Seas* made the descent to the field just to the east of Waschu, we all crowded the deck and leaned over the airship's railing, gazing at innumerable little moving dots far below—the entire town assembled in welcome! This sight, to tell the truth, did not overwhelm me with pleasure, for I was a little uncertain how to introduce my white friends to the blue-skins, and feared that their reception here would duplicate that at Rokiyok.

I therefore requested my twelve guests to conceal themselves for a few minutes in the inner compartments of the airships so as to allow me time to prepare the blue-skins for their arrival. This advice they followed reluctantly and not without murmurs of surprise; and when at length the dirigible grounded, Daolgi and I were the only ones to step out and receive the greetings of the multitude.

For the first five minutes we could do little more than listen to the shouts of welcome, the congratulations, the tumultous questionings and chatterings of the crowd. Hardly a word could we speak; everyone seemed bent on addressing us at once. Apparently they

were delighted to see us back; many a man, they reminded us, had been lost in the wilds of Guff, and our failure to return would have been nothing less than a public calamity. For, as the Mayor aptly expressed it, the financial market had been woefully slow ever since our departure, and our return would immediately bolster up the rate of exchange.

Patiently I listened to these and other no less flattering expressions of welcome. And when at length the opportunity arrived, I lifted my voice and informed the multitude that I had brought twelve friends back with me from Guff. They were clad in the outlandish costume of Xerion, but were quite harmless and even very likeable. In fact, they were in a sense kinspeople of mine, and——

"Barbarian! Barbarian!" shrilled suddenly from the audience in loud, excited cries. Cutting short my address and wheeling about abruptly, I discovered that Ardu Twell, in defiance of my orders, was standing in the doorway of the airship!

It was useless to argue with the throng. When Ardu was joined an instant later by her friend Zara Holque, and these in turn by Raii Lordo and Sani Par, the cries of "Barbarian! Barbarian!" gathered force and intensity, and dinned from all corners of the multitude. At the same time a general retreat began, the blue-skins pressing back at first slowly, then with gradually increasing speed. Suddenly someone on the outskirts of the crowd swung about and went buzzing away. Then someone else followed his example; then two or three others did likewise. Then, as more of the straw-clad figures loomed into sight, the blue-skins began streaking away by the dozen, by the score. Amused at this spectacle my white friends burst into laughter, and thereby made the debacle complete. The few remaining blue-skins, and among them the Mayor, uttered shrill cries upon hearing these unusual noises, and raced after the others for the safety of the iron streets.

As I stood gazing after the retreating throng, I was startled by a familiar voice, and saw the Captain holding out his two hands to me. "Well, good-bye, I must be going back to headquarters," he said. And after I had shaken both his hands (the usual way of expressing friendship on this planet), he hastily re-entered the airship, made sure that all his passengers with all their baggage had left, then snapped forth a rapid order. . . . And in another moment the *Eagle of the Seas* was no more than a black patch in the sky, and my twelve friends slowly and a little sadly gathered up their bags and sacks, and followed me toward their new home in the iron towers.

CHAPTER XXV

In Conflict with Authority

THROUGH streets that looked oddly deserted I led the twelve strangers to my apartments in the iron towers. Hastily I gave directions to have ample suites prepared for them, and then sent for half a dozen tailors to have them measured immediately for native costumes. There was some protest, to be sure, and Ardu Twell maintained that she much preferred her suit of straw, which she had made with her own hands and which was more artistic than the gloomy, close-fitting local garb. Zara Holque, however, thought that the blue-skin costume would make her look becomingly thin, and several of the other women favored it simply because it was the style. And so, after some debating Ardu was forced to yield the point, and the change in dress was unanimously accepted.

There was some further difficulty about inducing the tailors to measure the giants. But here "gulgul" came once more to the rescue; and the allurements of an exceptional fee persuaded the blue-skins to take what they considered a mortal risk—although, even so, they would not approach any of my white friends except in groups of three or four, and then always with one eye anxiously on the door.

A few minutes after the tailors had left I received a message from the Mayor. It was stamped with the official green seal (made in the image of "gulgul") and was written with many frills and flourishes and a windy verbiage proving it to be thoroughly legal.

"Most honorable Large E, Large R," began the message, "it is with regret that, in my capacity as Mayor of Waschu and head of the local police, I request you to abate the nuisance with which you have lately (unintentionally, no doubt) afflicted our town. If you wish to lodge any monsters or wild men among us, there is a proper place, which is in the municipal zoo, on the eleventh level underground. We will gladly provide you with all necessary chains and cages at public expense, but we cannot have giants prowling among us without ropes and unmuzzled. Needless to say, I deplore the necessity of sending this message to a Large Letter citizen, but there are some laws which cannot be broken even by men of wealth."

Upon reading this note, I did not know whether to laugh or be angry. I decided, however, in favor of laughter. And I determined on instant measures to suppress the Mayor. "Come, let us pay His Honor a visit," said I to Raii Lordo. But first, as a precaution, I presented Lordo with a handful of "Gulgul", for I did not consider it safe for anyone to be at large without green glass.

That "gulgul" was to have an unexpected effect. At first, as I led my friend through the iron streets, his appearance created a panic, and the people fled as if for very life, leaving the thoroughfares deserted. But an instant later, for reasons that I could not understand, the crowds began to reassemble. I became aware to begin with, of several blue-skins sneaking furtively behind us, their eyes searching the ground as though with sinister design. Though they darted occasional terrified glances at Lordo, they seemed moved by some purpose stronger than their terror. Soon they were joined by others, scores upon scores, like wolves in a craven pack, all keeping a good distance behind us yet all advancing as we advanced. I began to feel uneasy; every sort of ominous possibility flashed to my mind—should I turn upon them and demand that they leave us? Then on a sudden I understood. With a cry of triumph, one of them had swooped down and seized a little gleaming particle with which he rapidly made away, attended by half the others like starving hounds in pursuit of a bone.

"Look into your pockets!" I cried to Lordo. "Your green glass is escaping!"

Surely enough, Lordo's "gulgul" had been dropping out particle by particle through a tear in his clothing!

"At any rate," I commented, when finally our laughter had subsided, "that was not all loss. The town will be willing enough to receive you as a citizen, now that you're known to have 'gulgul.'"

A moment later, upon our arrival at the Mayor's office, we were greeted by pandemonium. Three clerks, four office boys, and two armed guards threw up their arms and fled, leaving us free to enter without formality.

Fortunately, the Mayor was in. I am sure, however, that he wished he had not been. His look of sudden terror reminded me of a small boy confronted with an escaped wolf. He did not actually scream with fear—

I think that he had not the power to scream—but his face was white and his knees trembled as he rose at our arrival. Had not the great form of Lordo blocked the one doorway, he would surely have sought instant escape. As it was, he glanced longingly toward the window, and might have leapt to death in the court below had I not seized his arm and forced him to a seat on the sawdust floor.

"We're not going to hurt you!" I cried. "We mean no harm!"

But, in his terror, he scarcely seemed to hear me, and remained white-faced and quivering.

I WAITED several minutes for his fear to cool down, while he crouched before me like a helpless beast at bay.

And, as I waited, an alluring idea came to my mind. "Lordo," said I, in our native language, "offer the Mayor a bit of green glass."

Lordo laughed, and held out a whole handful of "gulgul."

Even in his alarm, the Mayor gazed with excited interest, his little black eyes fairly bulging out of his head.

"Give him a piece," said I to Lordo.

And my friend thrust a bit of green glass into the palm of the astonished Mayor.

The miracle had been wrought. Frightened as he was, the Mayor did not refuse the gift. And it acted as the best of medicines, for his recovery was amazingly swift. In a moment, with hardly a trace of fear, he was scrutinizing the newly acquired "gulgul", and thoughtfully appraising its value. And in another moment, at my suggestion, he even dared to accept Lordo's proffered hand. Best of all, he made haste to write and sign a public proclamation stating that the twelve newcomers, being "Large Letter" people, were all desirable citizens.

Returning to my apartments with the official proclamation, Lordo and I chanced to pass Ardu Twell in one of the corridors. At first I caught her smiling pleasantly in my direction, though I could not be sure whether the smile was aimed at me or at Lordo. But her expression underwent one of those lightning changes she knew so well how to make, and when she passed us, it was with features blank and the most formally polite of bows.

Irritated as I was by this odd attitude of hers, I could not seek an immediate explanation, for there were urgent necessities hanging over me to drive her temporarily out of my mind. First of all, it was now essential to see that my twelve guests were comfortably settled in their new quarters—and to make sure that they had enough to interest and occupy them. With this thought in view, I invited them all to an informal conference that evening, and laid before them the plans which I had been pondering for some time. I explained again how Daolgi and I had become the two leading citizens of Waschu; but I pointed out that we must spare no effort to improve still further our position among the blue-skins. Above all, we must increase our power, augment our apparent wealth and our consequent control over the slavish citizens of this imbecile world; we must make ourselves masters not only of a town but of a planet. In this attempt, obviously, fourteen earth-people could be much more successful than two; and their united brains, when matched against the feeble intellects of the blue-skins, should leave no question of ultimate success. I therefore invited all the assembled men and women to be my associates in the scheme for the conquest of Venus.

This invitation they accepted willingly and even with eagerness. Some, enthusiastic, declared that it would be a fascinating pastime; others, more thoughtful of practical results, maintained that the subjugation of the planet would be an essential preliminary to a widespread migration from the earth; while the majority concurred from humanitarian motives, agreeing that any changes we effected in the lot of the blue-skins must necessarily be for the better.

There was only one person who obstinately contended that no possible benefit could accrue from our plot. That person, as might have been expected, was Ardu Twell. But I overlooked her opposition as due to mere perversity; and, since she was overwhelmingly outvoted, her resistance was without practical effect. Before the evening was over, I had the signatures of eleven of my new-found friends in a solemn compact to set ourselves up as uncrowned sovereigns of the world.

CHAPTER XXVI

The Conquest of a Planet

NOW began one of the busiest, most absorbing and yet most depressing periods of my career. Despite the innumerable activities which drained my time; despite my growing prestige and authority, which I shall shortly describe, I was almost constantly obsessed with gloomy thoughts. For, though I was gaining the universe, I had not that which I desired most of all. In fact, that which I most desired seemed actually to be retreating from my grasp—which is to say that the breach between Ardu and myself was widening.

It was Daolgi that was indirectly responsible for the disaster. And yet, in all justice, I cannot blame the poet. It was not that he deliberately weaned Ardu away from me, for since our arrival in Waschu he had been paying less attention to her (or perhaps she had been paying less attention to him)—and I had frequently observed him in the company of Zara Holque and the other women. It was merely that circumstances combined to make him the agent of fate.

Since our return from Guff, the coldness between the poet and myself had vanished. Feeling that he had no exclusive designs upon Ardu, I found it not difficult to resume the old bantering, intimate relations. A man of his forgiving disposition, fortunately, could bear me no grudge, and our friendship was revived even to the extent of the revival of the old arguments. But it was one of these very arguments, alas! that proved my undoing with Ardu.

It chanced one day that I requested the poet to assist me in a simple electrical experiment. With all good will, he at once agreed; but with his usual ineptitude, he absent-mindedly dropped a copper rod across two charged steel wires, causing a short circuit that might have been dangerous. I was just chiding him upon his awkwardness and was commenting somewhat dogmatically upon the advantages of having a practical mind when Ardu Twell chanced to pass.

I did not see her at first, and she had evidently caught a fair part of the argument before venturing to interfere. "A practical mind!" I suddenly heard an incisive feminine voice addressing me. "Perhaps, Erom Reve, you think *you* have a practical mind."

Startled, I turned about to find Ardu staring at me almost with hostility.

"Why, yes, thank you," I returned, as composedly as I could, "I think I have a practical mind."

"I've been listening to what you were saying," she challenged, "and don't in the least like the way you were attacking Mr. Kar. I think that——"

"Why, that was perfectly all right, Miss Twell," put in the conciliatory Daolgi.

"Not at all!" snapped Ardu. "I shouldn't think you'd submit to being called a vapory visionary!"

"Why, I didn't exactly submit," Daolgi started to protest, feebly.

"There was no question of submitting," I explained. "Daolgi and I were simply having a friendly little talk."

"A friendly little talk!" Ardu was peering at me with something dangerously like mockery in her big black eyes. "Your idea of friendship seems to be to lord it over everyone!"

"Not at all!" I objected, indignantly. "Why, Ardu, you're the last person in the world I'd want to see thinking that!

"Oh, don't imagine it makes any difference to me!" she flashed back, with a careless shrug. "I've merely noticed how you've been setting yourself up as king, making the rest of us do about as you please."

"I haven't noticed that you've been doing except as *you* please," I retorted, angrily. "Why, you haven't so much as lifted a finger for any one else! You haven't said a single pleasant word! Really, of all contrary, perverse——"

Suddenly I broke short. A quick flush in the girl's face told me that I was overstepping the limits of safety.

"Oh! Contrary and perverse, am I? she demanded, coolly. "Well, from now on we'll see just how perverse I can be!"

And, without waiting for my stammering apology, she wheeled about and went gliding away along the corridor, leaving me to gape futilely after her retreating form.

For months that pointless conversation was to haunt me. For months I was to blame those few senseless words for the distance that divided us—a distance that seemed greater now than when thirty million miles were between us. Truly, as she implied, I could not have had a practical mind, else I would not have let the thought of this capricious girl sadden my nights and days. Yet, had I not to some extent been practical-minded, there would have been nothing to save me from despondency, for it was only my incessant activities that kept my thoughts partially away from Ardu and permitted me some measure of sanity.

EXCEPT for this unfortunate affair, all my undertakings were progressing favorably. To begin with, there were my plans for my twelve guests—plans executed almost with mathematical smoothness. Having duly discarded their straw garments in favor of the local costume, all my visitors had been recognized not only by the Mayor but by the public; and, owing to the "gulgul" with which I had presented them, they were rapidly becoming among the town's most esteemed citizens. Moreover, they were among the town's most energetic citizens, for they were all rapidly learning the native language, and were eagerly aiding me (that is, all with one exception) in my scheme for dominating the planet.

That scheme was advancing even more brilliantly than I had anticipated. Realizing that on Venus, the ownership of land is the first prerequisite to the ownership of men, my friends and I went into the real-estate business on a wholesale scale. I opened offices in the most prominent thoroughfares of Waschu, and announced myself to be in readiness for the unlimited purchase of land; I paid for advertisements, not only in the papers of my own town, but in those of all the cities of Wultho, and before long had found myself the target of so many speculators and realty promoters that I had to engage a score of office assistants to attend to my flourishing business. Meanwhile, I was arranging for the purchase of every bit of property that seemed to be of value—farmlands, water-fronts, factories, mines, city buildings and even whole small towns; and so eager was I to procure everything available that I was doubtless charged exorbitant rates, and more than once (as I later discovered with more amusement than chagrin) I contracted to buy worthless swamps and patches of desert land. But I did not care; I was willing to be defrauded occasionally; the petty dishonesty of the Venerians impressed me as laughable; and since my store of money came to me quite easily I did not hesitate to dispense it in abundance. So extravagant was I, indeed, that after about a month I had no more than a fragment of green glass left, while Daolgi's supply (which I had invested for him) was similarly exhausted. And then it was that the two of us, in company with Sani Par and Raii Lordo, bade farewell temporarily to Waschu, and, making our way along the sea-shore to the abandoned cave and furnace, manufactured another supply of "gulgul," with which, heavily laden we started back to town after a few days.

Two or three times more, in the course of the next few months, we were similarly absent from Waschu, slipping away under cover of night and returning under cover of night, and so arousing neither comment nor suspicion. But in what amazement the good citizens would have stared could they have known how our wealth had increased! After the third or fourth expedition to the furnace, however, it became apparent that we should have to undergo no such inconvenience in future, for the Venerians have a singular custom whereby one is showered with money in return for the possession of money (which is not less strange than if one should be rewarded for receiving a reward, and then rewarded again for the second reward). Thanks to this preposterous practice, we soon found "gulgul" raining upon us in profusion.

At first I could not understand what all this treasure was for, since we had done nothing to earn it. Thinking that some mistake had been made, I was about to return it to its rightful owners when I decided, as a precaution, to consult the local codes of law. As a result of long perusal of those puzzle books, I was led to conclude that the occupants of the land I possessed were actually paying me for the use of it, paying at the legal rate of one quarter of its value per year, so that I should receive each month an enormous sum of "gulgul" absolutely without effort! I remembered reading somewhere that the ancient inhabitants of the earth—those barbarians who annihilated each other eight hundred thousand years ago—had some similar custom, often rewarding the possession of gold above the performance of valuable services. Yet it was some time before I could convince myself that the Venerians were so primitive; and, even after I was convinced, I had difficulty in choking down my moral qualms and taking advantage of a system so pernicious. It was only the thought of the great cause at stake that persuaded me to yield and accept my questionable income; and, even so, I felt more than one twinge of pity for the wretches toiling in mill and mine, while I was piling up the "gulgul" they groaned and sweated to earn.

None the less, I found the system not without advantages. True, those advantages accrued only to a small minority, of whom I was fortunately one, and were never tasted by the laboring millions. But to me it was as though I had acquired a wizard's wand; or as though my green glass possessed the magic power of reproducing itself like a living thing. Having taken possession of large strips of farm-land and large city areas, I discovered that my monthly returns enabled me

to purchase other property by the wholesale, and that the more I controlled the greater my income and the easier the extension of my power. In a surprisingly short period—far shorter, indeed, than I should have imagined possible—I found myself the richest man, not only in Wultho, but on the planet.

The second wealthiest man—and my only rival—was my chief assistant and partner, Daolgi Kar. But the poet did not take kindly to the acquisition of unlimited riches; he seemed rather bored by the whole proceeding, and looked upon my real estate activities with a cynical contempt that I found most provoking. In company with Yap Yap, he would frequently absent himself for whole days in the wilderness about Waschu, or else would loll about our apartments idly dreaming, while I labored with nerve-racking anxiety over our multitudinous concerns. In truth, there was little that he could have done to assist me, yet I was annoyed at his nonchalant aloofness, and took frequent occasion to chide him on his indifference; whereat, with an amused smile that was maddening, he would reply that he was sorry to see that I was not immune to the local contagion of "gulgul-hunting"; that life was meant for enjoying, and that, so far as was possible, he meant to enjoy it. Nevertheless, the only amusement I ever saw him take was in the scribbling of a few insipid verses.

BUT in spite of Daolgi's irritating attitude, I had on the whole little cause for complaint. The news of my wealth was spreading throughout the planet much as I had desired; I was becoming famous, famous in the only field wherein a Venerian is respected. The thousands of letters I received from importunate correspondents, and the hundreds of newspaper clippings that testified to my praise in distant provinces, were enough to bring satisfaction to one who but a year or two before had occupied a cage in a menagerie! As a protection against the financiers and politicians who daily swarmed to visit me, I was now forced to surround myself with a ring of secretaries; as a protection against the curious who desired the privilege of slapping me on the back (a native form of salute), I had to confine my "office hours" to twenty minutes a week; while in order to attend to my voluminous correspondence, conduct my gigantic real-estate transactions and execute a nation-wide advertising campaign, I had to engage an increasing corps of clerks and assistants, who ultimately came to number well over a thousand.

And yet not everything moved with oiled smoothness. I had my moments of doubt, misgivings, and even of alarm; there were times when the whole enormous structure which I had planned, seemed on the point of collapse. It must not be thought that a great financier could spring forth suddenly and full-fledged without arousing suspicion, particularly a financier of a foreign and unknown race; it must not be imagined that none of the blue-skins identified Daolgi and me with the escaped sawdust convicts, on whose heads there was a price. But, upon Venus, suspicion against a rich man is never so powerful as suspicion against the poor. Throughout the course of several investigations, we defended our position resolutely and successfully. First of all, there was the inquiry into the source of our money, for it had been argued—and not without reason—that no man could come into possession of such a fortune by legitimate means. This inquiry, fortunately, was quashed by means of a fragment of "gulgul" which found its way silently into the pocket of the chief investigator. Next there was the official examination of our "gulgul" by representatives of the government mint, for persistent rumors had hinted that our green glass was somewhat different in hue and texture from the standard product. Here again a timely "gift" came to the rescue; and, following the unofficial receipt of an appreciable amount of counterfeit glass, the examiner reported that the rumors of counterfeiting were false.

But matters were not so simple when, after three or four months of uninterrupted success, we were visited by a dozen government detectives, commissioned to investigate the charge that we were escaped convicts.

After the first casual glance at us, not one of them entertained a doubt as to the correctness of the charge, particularly since some drawings which they held in their hands (the drawings made while we were in the menagerie) identified us beyond dispute. Of course, I thought of disposing of these gentlemen much as I had disposed of the other investigators, but I found it impossible to isolate their leader and so to offer the usual fee. Accordingly, it was necessary to adopt more ingenious methods. Politely I signified my willingness to accompany them to prison, making only the request that they first allow me time to collect a few trifling articles from my apartment. To this request they could not but accede; and so I left them waiting in an anteroom with Daolgi while I hastened to the furthest recess of my laboratory. Having learned that wireless communication was unknown among the blue-skins, I was resolved to try a unique experiment. In the anteroom where they were seated, I had improvised a radio receiving apparatus capped with a crude tin horn, and in the laboratory, a hundred yards away, I had erected the broadcasting contrivance. With just a tinge of amusement, in spite of my fearful predicament, I began sending preposterous messages, which Daolgi (in response to my whispered suggestion of a moment before) was receiving for the benefit of the assembled detectives.

I had calculated on the innate superstition of the blue-skins to make the experiment a success; yet the results were gratifying beyond anything I had anticipated.

It has always been a matter of great regret to me that I could not actually have been on the scene to witness the rout of the enemy, for, as described in the picturesque words of Daolgi, it was better worth watching than the most brilliant comedy ever staged. When my voice began pulsing through the radio, disguised and ominous-sounding, with a sepulchral note that was enhanced by the metallic ring of the instrument, the detectives leapt to their feet in alarm, like men who have seen a ghost. And like men who have heard a ghost, they listened to that vibrant, uncanny voice, issuing apparently from nowhere and bidding them beware of their intended victims, who were men with magic powers akin to the powers of gods, and who would smite their foes with sudden and terrible death, without warning.

I am not sure whether their hair actually stood on end, as Daolgi insisted that it did; I am not certain whether their bluish faces became blanched and horror-stricken, as Daolgi claimed, and their stick-like legs trembled like saplings in a gale; I even suspect Daolgi of poetic exaggeration in stating that their little yellow teeth chattered and their little black eyes bulged in terror out of their narrow heads. But what I do know, and what alone is of importance, is that their flight was swift and immediate, and that they never molested us again. When at length I had ceased operations with the radio and returned to the anteroom, no trace of any of our guests was to be seen, and the poet and I had one of the heartiest laughs of our lives.

CHAPTER XXVII

Premonitions

"Gulgul"

"O rare Green Glass, thou high and holy god
To whom the millions bow in pious awe,
Thou art religion, moral light and law
To this dark world thou rulest with a nod.
Thou art a sovereign, whose uplifted rod
Can shake the nations at thy least command.
Like flies thy vassals swarm in every land,
And like machines they moil for thee, and plod.

"What is the power of the white-lipped sea,
The brilliance of that boastful clown, the sun?
With scorn we harken to the praise they've won,
O rare Green Glass, and hold them less than thee.
Thou art our light and love, and there are none
Who know thee not as hope and destiny!"

THE above translation, I am afraid, does not do justice to Daolgi's famous poem. But, as originally written in the Venerian tongue, it displayed an inimitable vim and force, and an irony that was delightful. It is certain that the blue-skins did not catch the irony, but interpreted it seriously and literally; and there can be no doubt that the general praise it received was due solely to the general misunderstanding of its meaning. Yet, misconstrued as it was, it fortified our position and power immensely and laid the foundation of Daolgi's literary renown.

But, while the credit for the achievement belongs entirely to the poet, it is probable that, except for my intervention, this admirable sonnet would have remained unknown.

It all happened in the most peculiar fashion. Returning to our apartments one evening in a particularly cheerful mood, I found Daolgi pacing the floor meditatively, a half amused expression on his face, a long sheet of scribbled note-paper in his hand—clearly, he had written another poem! Feeling sure that he was about to read it to me, according to his invariable custom, I anticipated him by asking to see it; but, to my great surprise, he refused my request. "Oh, it's a mere nothing," he said, disparagingly. "Just an experiment, an attempt at writing in the Venerian vernacular—a misfit sonnet which I did in fifteen minutes. Probably the poorest thing I've ever done."

Of course, these protestations only whetted my curiosity. I surmised that Daolgi had at least written something worth while; and, though not naturally a poetry lover, I was suddenly anxious to pass judgment on the forbidden work. Yet it was only by dint of much coaxing that I persuaded Daolgi not to tear up the manuscript. And, when at last he yielded, he wore the wry expression of one who consents against his will to an injury to his reputation.

I glanced at the poem, and uttered a cry of delight. "Wonderful!" I exclaimed. "Wonderful! I may not be a literary critic; but, as a business man, I know that this work is worth a fortune!"

Daolgi looked at me incredulously. "I agree with you," he stated, drily, "that you are no literary critic."

"Perhaps not," I continued, enthusiastically, "but, just the same, if you let me handle this poem for you, you'll be a made man!"

"I've no desire to be a made man!" he grumbled.

"Nonsense!" I protested. "Every poet wants his verses heard!"

"Not his worst verses!" countered the impossible Daolgi.

"His worst verses may be thought his best!" I flung back. And, to my surprise, Daolgi agreed.

But it required another half hour's arguments to convince the poet of the merits—at least, the commercial merits—of his latest work. I had never seen a man so obtuse, so utterly blind to his own best interests. I believe that it was only to escape from an unpleasant controversy that he finally agreed to leave the poem in my charge, bidding me do with it exactly as I pleased—and advising me to consign it to the flames.

But, regardless of his protests, I wasted no time about making the poem public. That very day I engaged, at advertising rates, two full pages in the "Sohsohe Daily Scandal," the most widely circulated paper in the land. On one page I had Daolgi's poem printed in enormous type, and on the opposite sheet I had his photograph reproduced in color, together with a brief biographical account that was entirely flattering and largely fictitious.

The result was instantaneous. The country was taken by storm. Never before, on this prosaic planet, had such a thing as poetry been known; never before had the merits of green glass been presented so clearly or with such telling effect. The popular mind was enchanted by the fluent rhythms and ringing rhymes of the sonnet; the popular imagination was captivated by the delicious sentiment expressed; the poem was copied and recopied, quoted and re-quoted, commented upon and commended times without number. When it had been published for a scant three weeks, it had already taken on something of the dignity and the reputation of a classic; school children were being compelled to study it, to analyze it, to memorize it; preachers were using it as the text for sermons, and great financiers as the theme of lectures to employees; newspapers were basing editorials upon it, and innumerable imitators were striving in vain to copy its lofty thoughts and subtle cadences; song writers were setting it to music (the unbearably raucous, noisy music of this planet), and there was even talk of having it adopted officially as the national anthem.

DAOLGI, meanwhile, was establishing a reputation that almost eclipsed my own. His literary products were in demand; his earlier poems (which he was engaged in translating into Venerian) were enjoying a vogue due less to their intrinsic qualities than to his great poem on "gulgul"; he was actually earning quantities of green glass on his own behalf through the syndication of his verses. Meanwhile, his photograph was being circulated throughout the country; eminent authors and critics were visiting him by the score; he was the recipient of half a dozen honorary degrees from the universities of as many lands; he was invited to join literary leagues and societies without number; he was urged to go on a nation-wide lecture tour at an enormous salary; he was interviewed by swarms of reporters, and his name stared at one from the pages of every popular magazine; he was awarded a glass medal by the World-Wide Association of Authors for making the year's greatest literary contribution, and was even presented—the greatest honor of all, from the native point of view—with a Badge of Merit by the National Society of Bankers for his services in the cause of "gulgul."

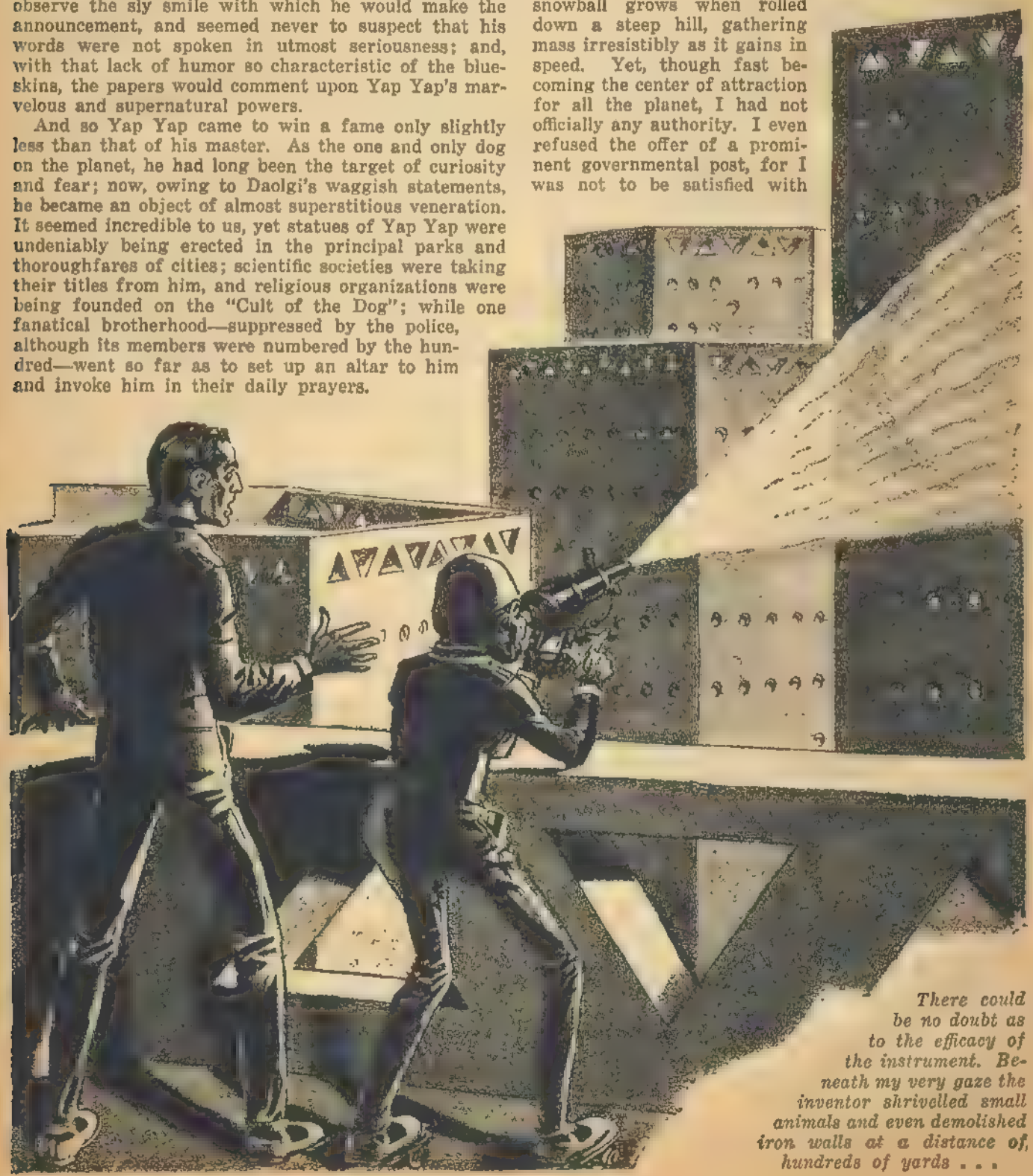
Yet all the while he showed no appreciation of his newly won fame. He declared that it was all an accident, a mistake, and that another mistake, another accident might dissipate it; and he went so far as to grumble that his renown robbed him of the leisure and tranquillity for poetic composition. There was nothing I could do to make him take his reputation otherwise

than as a joke; it was useless to remind him that he was the envy of thousands. He would reply that his sudden eminence was the most laughable thing in his experience; and he would carry his odd sense of humor into conversations both private and public and even into the daily press, and would make all sorts of preposterous statements to reporters and interviewers. For example, he would ascribe his literary abilities to the length of his arms or legs or to his vegetarian diet, and the papers would solemnly report every word he had said. Or he would state that there was a guardian angel who hovered over him and aided him while he worked, and as the physical embodiment of that angel he would designate his chief assistant and secretary, Yap Yap. But reporters seemed never to observe the sly smile with which he would make the announcement, and seemed never to suspect that his words were not spoken in utmost seriousness; and, with that lack of humor so characteristic of the blueskins, the papers would comment upon Yap Yap's marvelous and supernatural powers.

And so Yap Yap came to win a fame only slightly less than that of his master. As the one and only dog on the planet, he had long been the target of curiosity and fear; now, owing to Daolgi's waggish statements, he became an object of almost superstitious veneration. It seemed incredible to us, yet statues of Yap Yap were undeniably being erected in the principal parks and thoroughfares of cities; scientific societies were taking their titles from him, and religious organizations were being founded on the "Cult of the Dog"; while one fanatical brotherhood—suppressed by the police, although its members were numbered by the hundred—went so far as to set up an altar to him and invoke him in their daily prayers.

There was still another member of our party that was to achieve a national—or, to be precise, an international—reputation. And that member was none other than Ardu Twell. She was to make herself famous—or, rather, infamous—for a characteristic action that I shall describe a little later; and, incidentally, she was to give me a hundred times more trouble than ever in the past.

But before I describe the incident that was to prove disastrous, I shall have to recount certain developments in the world at large, and, to begin with, in my own fortunes. For I had been prospering beyond all expectations. I had been acquiring position and influence surpassing my wildest dreams; my wealth and power had been growing as a snowball grows when rolled down a steep hill, gathering mass irresistibly as it gains in speed. Yet, though fast becoming the center of attraction for all the planet, I had not officially any authority. I even refused the offer of a prominent governmental post, for I was not to be satisfied with



There could be no doubt as to the efficacy of the instrument. Beneath my very gaze the inventor shrivelled small animals and even demolished iron walls at a distance of hundreds of yards . . .

the mere shadow of power. Well knowing that with the ownership of "gulgul" went the ownership of the planet, I was content to stand unobtrusively in the background, pulling the wires and levers that moved the world, while decorated puppets sat before me on sawdust thrones and bowed mechanically in response to my commands. Though apparently no more than a private citizen engaged unassumingly in private business, I was the possessor of power that kings might have envied; and through underground channels, by a whisper or a gesture or even by a silence, my wishes were flashed like the mandates of an absolute despot. Thus, if the legislature were contemplating the passage of some obnoxious law, a word from me would "table" it effectively; if the higher courts were debating some important decision, the merest hint of my opinion would decide the question beyond cavil; if a delegation of capitalists were planning the further enslavement of labor, a swift expression of my disapproval would terminate their schemes; if two foreign nations were contemplating warfare, my refusal of a loan might condemn them to peace.

I mention all this because, as I look back upon the events of those stirring days, my power appears all the more ironic, my great wealth all the more impotent, in connection with the one event wherein my will was disregarded and my express veto of a nefarious scheme availed nothing. It is just a bit disheartening to recall that, with a stroke of my hands, a mere snapping of my fingers, I could have crushed any undertaking however beneficent, but that my tremendous authority was like the bawling of a babe, when directed against those malevolent influences that capped our stay on the planet in bloody tragedy and disaster. Even now I have difficulty in understanding why I failed so signally, but, looking back with the perspective of years, I am convinced that the forces of evil were rooted so deeply by long practice and precedent, that no merely accidental power such as mine could affect them. And I am inclined to believe that my apparent conquest of Venus was in reality no conquest at all, and that I succeeded only in so far as I followed the lines of least resistance, and failed whenever I attempted a departure from established belief or convention, or an innovation too advanced for the crude and barbarian psychology of the blue-skins.

Be this as it may, I was unable in the end to avert my downfall—and the downfall of the planet. The ultimate catastrophe, although so sudden and overwhelming as to resemble a cataclysm of nature, was doubtless rendered inevitable by the very character of Venerian customs, institutions and habits of thought, and would assuredly have occurred eventually had it not been for the mischance that precipitated it with explosive violence. Yet, some months before the actual disaster, I foresaw it and strove furiously to forestall it; and my failure is eloquent of the feebleness even of "gulgul", when face to face with those titanic forces of savagery storming beneath the breasts of the Venerians.

Had it not been for my rôle as the patron of scientists and inventors and the protagonist of great enterprises, I should never have suspected that the whole planet complacently sat, as it were, on the surface of a high-pressure boiler that was presently to explode and blow the world to fragments. It was "small d, small d"—a commonplace mechanic employed in one of the vast heat and power plants—who chanced to make the fatal discovery; and it was with tremendous enthusiasm that this undistinguished little blue-skin called upon me, explaining the details of his invention which followed his discovery, and seeking my financial aid and my recommendation. Merely by chance, as he admitted, he had come across the great secret, the deadliest ever revealed to any member of his race; merely by chance, while performing his duties amid the electric motors and dynamos, he had originated the "death-torch," a simple and yet amazingly powerful machine that could be pointed like a telescope, and, by means of the concentrated and distorted power of light, could deal instant death to any foe above the horizon. With an eagerness that I thought diabolic, the inventor displayed his unspeakable contraption, a little lantern-like device equipped with prisms and lenses and dominated by a long pointed tube through which the fatal ray might be aimed.

There could be no doubt as to the efficacy of the instrument. Beneath my very gaze the inventor shrivelled small animals and even demolished iron walls at a distance of hundreds of yards; and I could readily believe that, as he claimed, the power of the machine was capable of infinite extension. But when I protested that that very power might make life on the planet impossible, "small d, small d" merely smiled a superior smile, and assured me that, on the contrary, it would make life much safer, since it would render war so terrible that it would be abolished. It was now my turn to smile, for even the most elementary psychologist would have perceived the sophistry of this argument, an argument based on the assumption that the blue-skins were reasonable creatures!

WHILE I was attempting to convince the inventor of the fallacy of his views, I recalled a fact which made me turn cold with horror. Somewhere in those books embodying our meager information regarding the ancient barbarians of the earth, I had read of the disinterment of fiendishly destructive weapons known as "death-beams," ingenious machines that had operated by means of the power of light and had once flashed death around the planet. And I recollected the theory, generally accepted by historians, that these Satanic engines had been responsible for the decimation of the barbarians before poison gas had wiped them out completely!

Yet, fortified as I was by the knowledge of past disaster, I found it impossible to convince "small d, small d" of the danger of his invention. Perhaps, had I acted with shrewder diplomacy and greater presence of mind, I might still have saved the planet, accomplishing by craft that which I could not achieve by persuasion; but, at the moment, I was in a nervous, horrified frame of mind, and let anger dominate my reason. Not only did I refuse to finance the death-torch or to speak a word in its favor, but I threatened to go to unlimited expense to have it suppressed. It would have been wiser, as I later realized, to have feigned interest in the contrivance, to have purchased it at any price, and then to have destroyed it; but the chance, once lost, was not to return; and the machine, once beyond my power, was carefully shielded from the menace of my known hostility.

Thenceforth not even the unlimited offer of "gulgul" could tempt the inventor. I could well understand the reason, for before long the rumor reached me that the government of Wultho was negotiating for the purchase of the death-torch—and that "small d, small d" was about to change his name to "small d, Large D." Of course, I brought all my influence to bear to crush the threatened transaction, and dealt out green glass liberally to prominent officials for their refusal of the invention; yet, as I later learned, the refusal was only nominal, and the death-torch was secretly being manufactured in enormous quantities by the soft-padded Bureau of War. Even at the time, indeed, I had a suspicion of some such perfidy; and, in anticipation

of a day when red flames would flash from all horizons and death-dealing lightnings strike from every sky, I undertook a series of hasty and complicated and scrupulously secret preparations on my own behalf.

CHAPTER XXVIII

The Sparks Begin to Fly

FOR many months I was engaged in scientific experiments of so private a nature that none but my white friends were admitted into my confidence. As the reader may surmise, certain of those experiments were not unconnected with radio broadcasting, for I was still striving to communicate with the earth. The more difficult of consummation this object appeared, the more diligently I labored—and the opportunities for diligence were boundless. I was handicapped not only by the relatively weak electrical power at my disposal, but by the stubborn resistance of the Venerian atmosphere and by the fact that I had usually to experiment under unfavorable astronomical conditions, when the earth was not twenty-five or thirty million miles away but a hundred or even a hundred and fifty millions. But gradually I improved my apparatus, and at length, after half a year of experimentation, I succeeded in flashing a message around the planet. Much further improvement was still necessary before I could penetrate the millions of miles of space and be heard by my fellows on earth; but I hoped that such improvement would be merely a question of time; and I awaited impatiently the earth's next conjunction with Venus, when I should have the opportunity of testing my inventions more fully.

Meanwhile, since I had never ceased to dread the peril of the death-torch, I was taking steps to insure as best I could against calamity descending upon us. Each day, with the aid and advice of Sani Par and the others, I devoted several hours to the consummation of a scheme which at first seemed utterly mad, but which began to appear somewhat less extravagant as time went by—the construction of a set of projectiles which, if need be, might carry us all back to earth. I was familiar, of course, with the mathematics of the great Pago Ram, whereby interplanetary travel had first become possible; and I had acquainted myself intimately with every screw and bolt and wire of the whole complex mechanism which had conveyed us to Venus. This I now set about to copy, erecting the apparatus (for lack of a mountain top) upon a lofty headland at the verge of the wilderness some miles east of Waschu. Having enclosed this rocky eminence with a high iron wall as a shield against the curious, I set about to manufacture the projectiles and the firing-gear piece by piece; and being unable to accomplish the prodigious task unaided, I engaged a corps of trained mechanics to assist me, taking care to make the duties of each so specialized that no one could divine the nature of the complete undertaking.

Daolgi meanwhile looked upon all these activities with the cynical contempt that I had learned to expect from him. He seemed by no means convinced that I would succeed in constructing the projectiles, and even less confident that I could harness the interatomic energy necessary to launch the projectiles into space; and he argued—not without reason, I must admit—that the whole contrivance would be useless unless we managed to communicate with the earth, for if there were no one to guide us from afar with radio-electrical waves, then we would assuredly be lost, comet-like, amid the abysses of the Infinite.

But, relying upon the success of my radio experiments to make the projectiles available in case of need, I worked uninterruptedly in spite of Daolgi's taunts. Thanks to my numerous assistants, progress was rapid; and the first projectile—which was followed within a few days by six others—was completed more than a month before I had the conclusive opportunity of testing the radio. As nearly as possible, it was the exact duplicate of that which had brought us to Venus, an elongated bit of metal, fortified with a coating of the same heat-resisting alloy, equipped with the same type of parachutes, and capable of being launched by the same sort of interatomic blast. I even went so far as to provide it with stores of compressed food, water, medicinal equipment, scientific instruments and of all the other paraphernalia we had found necessary on our first flight; and I spent days in elaborate computations as to the requisite speed of departure and the precise moment when it would be essential to leave the planet.

While undertaking all these precise and complicated preparations, I did not really believe that we should have occasion to make use of them, and I was actuated by the spirit of scientific experimentation much more than by the thought of actual perils. But there came a time—far sooner, indeed, than I could have anticipated—when my friends and I turned in terror to the projectiles as our only salvation in a world suddenly grown fiery red.

It was really the death torch that was responsible for the trouble, although, all things considered, that infernal contrivance was merely an incident in the inevitable. In the beginning, indeed, no word of the death-torch was spoken, no sign of it was visible; and the actual forerunners of the eruption were so mild and apparently so insignificant, as to arouse but little suspicion.

To be precise, the first steps in the disturbance were merely political. As though at a signal previously agreed upon, speakers in the Wulthonian national "Gradt" (the oligarchy of Large Letter Men that officially ruled the land) began to join loud-voiced army and navy officers in pleading that the country was unprepared for war. An army of ninety millions, they contended, was absurdly inadequate for a nation of almost nine hundred millions; the three years of compulsory training for young men and women should be lengthened to six; the military appropriations should be increased from three-quarters to seven-eighth of the government's annual income, and the next generation should be taxed to pay the deficit.

ALL this, of course, had often been heard before. The more "gulgul" the people had doled out for warlike purposes, the more they had been required to dole out; and with every increase of military power the prophets of military disaster had become more blatant. Yet so low was the average intelligence, that the blue-skins listened seriously to the mouthings of the war-makers; while so utter was their dominance by emotion, that the tragic experience of innumerable generations could teach them nothing. And so, when the professional patriots of Wultho began to describe the country's military impotence, the gullible masses trembled and shook their heads in sad agreement; and there was little popular disapproval but many mumblings of relief when the "Gradt" honored the military leaders by an additional appropriation of half a ton of "gulgul" (a sum representing the average yearly earnings of a hundred million workers). This enormous amount—so ran the terms of the appropriation bill—was to be employed secretly for purposes of "national protection," according to the discretion of the Governmental Commission on Defense. It was this money which, as I was later to learn, made

possible the purchase and large-scale manufacture of the death-torch.

The singular fact about the entire procedure was that it was imitated by all of Wultho's important rivals. The empire of Dangrug, located to the south and southwest; the island Republic of Blatt, situated a thousand miles across the ocean to eastward; the kingdom of Lullum and Torrie and the smaller nation of Gung to the north, and the powerful commercial commonwealth of Uganthu beyond the wide northwestern sea—these are but a few of the states that followed in Wultho's footsteps. In all these countries the military appropriations were forthwith doubled or tripled, the increase in the case of Uganthu amounting to a whole ton of "gulgul"; in all of them secret preparations for aggression were at once undertaken on a gigantic scale, invariably in the interest of "national protection"; in all, by some colossal irony of which I learned only when too late, the death-torch was surreptitiously manufactured in enormous quantities (the plans had invariably been obtained by means of spies); while all the governments looked upon this diabolic weapon as the agency of salvation or of conquest in the next war.

The next war now became a question only of months or of weeks. Eager as the military leaders were to test their new offensive implement, they desired no more than a pretext for plunging into an orgy of destructiveness. And such a pretext was not hard to find. It would have been invented if it had not been discovered naturally, or it would have been manufactured out of loud words and air, according to the usual practice; for the Venerians have an amazing custom, which makes it wrongful to start a war without first giving a reason, though it is in no way wrongful to choose a reason that may affect but a few citizens or at most but a few hundreds.

And so it was in the present case. The ingenuity of the blue-skins was more than equal to surmounting the technicality that prevented the active employment of the death-torch. The diplomats of Dangrug or of Uganthu would have found a way, if those of Wultho had not done so; but those of Wultho were quite able to cope with the emergency. Yet the specific method they chose proved most unexpected. Especially was it unexpected by my white friends and myself, who had had little opportunity of watching Venerian diplomacy at first hand—and it was as embarrassing as it was unforeseen. For it was to thrust us abruptly into the forefront of international affairs, and in particular was to bring down a storm about the head of that natural storm-brewer, Ardu Twell.

Ardu, in a word, was to light the spark that started the world-wide conflagration. And she was to light it in a simple and characteristic manner. The whole disturbance arose about nothing—less than nothing, I should say—yet the direct result was to be the ghastliest misfortune that the planet had ever known.

It was at a public reception in Waschu that the trouble commenced. In accordance with ancient custom, the Lord High Councillor of the small neighboring country of Gung was making one of his periodic diplomatic tours through Wultho, and had just arrived for a brief stay at Waschu. Of course, high honor had to be paid to one so distinguished, and the Mayor had understood it to be his duty to prepare a banquet at which the Large Letter citizens might offer their respects to the visiting grandee. To this banquet all my white friends and I had been invited as a matter of course, since all of us were known as the possessors of much "gulgul." And, having no forewarning of the disaster that lay in store, all of us had accepted the invitation as a welcome opportunity to learn something of Venerian social customs.

Yet, a few minutes before the opening of the banquet, I had an intimation of approaching trouble. For when I joined my thirteen friends, before setting out for the reception hall, I was alarmed at the appearance of Ardu Twell. At a glance, I saw that she had violated several native conventions. To begin with, she had not confined her garments to gray, brown or black (the three recognized colors of respectability). This breach would have branded her as original and hence vulgar on any occasion, but especially so at a sedate and formal ceremony such as the present. Yet this was not the worst. Not only had she manifested a plebeian liking for vivid colors, but the particular shade of red, with which she had trimmed her suit, was one which, for diplomatic reasons, was extremely undesirable. Red was the national color of Gung, a sacred color to be used only on ceremonial occasions, and its indiscriminate display might be regarded almost as a profanation.

Although Ardu and I had not been on the best of terms of late, and although she had politely frozen all my recent attempts to speak with her, I felt bound to point out this breach of international etiquette. I pleaded with her to wear some other and more appropriate costume; I warned her that she was courting disaster, and went so far as to suggest that it would be better for her to feign illness and absent herself from the banquet, than to appear in such unseemly garb.

But, as might have been expected, my only reward was an indignant refusal. "You just attend to your own clothes, Erom Reve, and I'll attend to mine!" exclaimed the offended Ardu, with a haughty toss of her curl-crowned head. And though Daolgi and some of the others attempted to intervene and to explain the possible consequences of her obstinacy, she still insisted upon going to the banquet with red trimmings.

As there was nothing else to do, I let her have her way. And, as I walked moodily to the reception hall, I strove to console myself with the thought that her unconventional garb would be overlooked as due to boorishness or ignorance. Little did I imagine that, before the night was over, she was to be guilty of another and far grosser sin against etiquette.

IT was almost midnight when we finally reached the great public ballroom in the Seventh Basement (no really fashionable affair on Venus begins much before midnight). Early as we were, a great crowd had preceded us; and excited, chattering, crackling groups of blue-skins stood all about awaiting the arrival of the Lord High Councillor. All were dressed in their most immaculate and colorless suits; all had taken scrupulous precautions to polish their skins and hair so as to look precisely like everyone else; all struck me as like nothing so much as bees in a hive as they flitted about on the lavender-sawdust in the glare of the countless walnut-sized electric bulbs. And, as always on this planet, the men and women looked so much alike that it was impossible to tell them apart.

Our arrival caused a momentary flurry, and from all sides the blue-skins pressed about to greet us. I observed that Ardu, with her customary self-assertiveness, pushed herself forward prominently, so as to be first in receiving everyone's welcome; I also observed that many eyes were turned upon her in wonder and even with a little of horror. But politeness (which, on Venus, means the suppression of one's true feelings) did not allow the guests to express their dismay, and in the beginning Ardu's wilfulness created no particular trouble. True, on one occasion I did observe the Mayor approaching her gravely, as if to address her on some important topic; but she received

him with such a winsome smile, and began commending him so enthusiastically on the orange-sawdust decorations, that he retreated without mentioning the subject which, I am sure, was uppermost in his mind.

As yet the Lord High Councillor had not arrived. But no surprise was occasioned by his tardiness, as the Venerians regard it as polite to be late at a social affair. Meanwhile, to check their impatience, the guests began to engage in the national pastime—a form of athletics known as a "whiggig" or dance. The principle of this sport, which I could never quite understand, seems to be to stand on one leg, fling out one's arms, and whirl one's self about as rapidly as possible, continuing in a quick succession of loops and spirals until at length dizziness compels one to fall to the floor. In this recreation the Venerians have acquired that skill which comes of long practice. I was surprised to observe that, while the ballroom had become but a blur of revolving figures, collisions were rare and the blue-skins succeeded even in keeping time to a noisy music pounded out of tin instruments reminding me of kitchen kettles. Unfortunately, appearances demanded that my white friends and I take part in these mad gymnastics; and after we had vainly tried to get the swing of the thing, and I had suffered several awkward falls and Daolgi had painfully bruised his shins, we were much relieved when a sudden awed silence announced the guest of the evening.

While all of us stood as though transfixed with terror, a little elliptical door at one end of the apartment opened, and in strode a little old blue-skin crowned with green feathers. I thought at first that this was the Lord High Councillor himself, but learned my mistake after the newcomer had thrice bowed to the sawdust floor and announced that the Lord High Councillor was about to appear. Having made his report, the green-feathered one duly stepped to the side, to be followed at intervals by a pink-feathered and a yellow-feathered blue-skin, each of whom went through a precisely similar ceremony and made a precisely similar announcement. By this time we were becoming impatient; and so we were merely annoyed when a purple-feathered blue-skin appeared and played a long blast on a horn-like instrument that sounded like a steam whistle. But at last our suspense was at an end, and while the four new arrivals crouched down on their hands and knees in salutation, the Lord High Councillor himself stood framed in the doorway—an excessively short and narrow-breasted blue-skin, with stooping frame and little staring black eyes that leered from their sockets, like the eyes of some bird of prey.

A deathly hush had come over the assemblage; not a murmur, not a motion broke the solemn stillness. With short steps, of military evenness and precision, the Lord High One advanced toward the center of the room, while the spectators made way before him like children before their master. And with steps equally short and equally precise, the Mayor of Waschu stalked from the opposite corner of the room. Not a word did either speak, but when finally they were within touching distance, they both halted, and the visitor, with the most sedate air imaginable, reached up and kissed the Mayor resoundingly on the cheek.

This ceremony would have astonished me had I not known that kissing on Venus is a rite reserved for austere and formal occasions, and is one of the especial prerogatives of ambassadors toward those they desire to honor. But, unlike me, my white friends—and Ardu Twell in particular—were all amazed at what they mistook for an exhibition of affection, and not until too late, alas! were they to understand that the Lord High Councillor felt no more than a diplomatic attraction toward the Mayor.

I mention all this because, had Ardu understood the true state of affairs, she would never have committed the indiscretion that was to involve us in such endless complications. She would certainly not have thrust herself almost face to face with the Lord High Councillor immediately after that dignitary had honored the Mayor; she would not have beamed so graciously upon him and thus have invited disaster. And when the Councillor performed what he doubtless regarded as a rare bit of condescension, and reached up suddenly and kissed her loudly on the chin, she unquestionably would have refrained from offering the supreme insult.

From the hot flush that mounted immediately to Ardu's cheeks, I knew that she had not taken the honor in proper diplomatic spirit. And from what happened the next instant, I realized that she had taken it in the very worst spirit possible. There was strength in Ardu's arm as well as in her tongue; and there seemed to be double strength when, with rapid-fire delivery, she turned upon the High Councillor, and smacked him furiously on the cheek. Certainly, she used entirely too much force, for, while the audience stood petrified with amazement, the smitten official staggered, reeled over, and tumbled in ruins to the floor.

IT was fifteen minutes before he recovered. During the interval, the room was a tumult of shrieking, muttering, groaning, scurrying, horror-stricken blue-skins. The festal spirit of a few minutes before had vanished; astonishment and terror shone in the faces of all; little groups stood about excitedly chattering; some screamed and some fainted, some darted glances of hatred at Ardu and some flitted about like creatures demented. But all seemed to realize the gravity of the occasion. Meanwhile a crowd had gathered around the stricken Councillor, some shrilling inquiries as to his wounds, some helping him to a sitting posture, some offering him drinks of water and of stronger beverages, by way of first aid. The water he disdained, but after a few minutes he felt well enough to accept a flask of "dudwa" (a grief-killing liquid, the use of which is permitted only for medicinal purposes). Somewhat revived by a long and inspiriting draught, he at length rose shakily to his feet; then, as he staggered to the center of the room with arms ostentatiously waving, another awed silence fell upon the assemblage, for evidently he was about to make a momentous utterance.

"Citizens of Waschu," said he, after clearing his throat several times by way of introduction, "citizens of Waschu, when I arrived here this evening I felt almost attracted toward your town, and had prepared a speech wishing it much 'gulgul' and prosperity. But that speech will never be spoken. It would no longer express my feelings. Since you see fit to offer me an insult, let the insult be flung back to you! May you never see another bit of 'gulgul'! May the town tumble in ruins about your feet! That is all! I take my leave!"

And, turning to his four feathered attendants, while the spectators stared at one another in consternation, he issued the sharp command "Come!", and started toward the door.

"But Most Eminent Lord Councillor!" pleaded the Mayor, as he planted himself in the retreating official's path. "Most Illustrious Lord Councillor, it is all a mistake! Your assailant is nothing but a foreigner—and what can we expect of foreigners, Your Worthiness? She did not understand——"

"If she did not understand," flared back the Councillor, "why did she wear red on her suit? And why did you permit her to do so? It was a deliberate scheme

to humiliate me! Oh, I can see it all! Not for nothing have I been a diplomat all my life! I shall report this outrage to the Home Embassy, who will take steps to avenge me!"

"But Most Magnificent Lord Councillor——" again began the Mayor desperately, as the honored guest approached the door.

"Most magnificent rat!" snarled the Councillor. And, by way of paying his compliments, he rapped the Mayor soundly on the cheek. Then, while the latter stood helplessly rubbing the bruised spot, the diplomat bustled through the doorway, followed by his four feathered footmen, who marched stiffly out without bow or flourish, or any token of respect.

Needless to say, the reception was ruined. Though the guests did make a few feeble attempts at jollity, all joy and laughter had gone out of them, and even the "whiggig" could no longer be indulged in with gusto. It was early, very early when the party broke up—in fact, not much after sunrise. And as the guests took their way homeward through the dark corridors, it was with the air of mourners at a funeral, for all alike realized the seriousness of the night's events and the probability of fateful consequences.

CHAPTER XXIX

The Storm Breaks

THE first result of the unfortunate banquet was that the Mayor issued an edict for Ardu's arrest on a charge of assault and battery. No sooner had she returned to her apartments than half a dozen police paid her a visit, and bore her off, struggling, to the jail in the lowest sub-basement. I did not hear of this until several hours later, for I had been trying to snatch a little belated sleep; and it was only upon Daolgi's excited entrance that I learned the news and hastened off to the rescue.

I called at once upon the Mayor and demanded Ardu's release. But never before had I seen that official so obdurate. The offense charged against the girl was a grave one, he reminded me: it was criminal even for a Large Letter person to show disrespect to a visiting diplomat. Besides, this was a matter not entirely within his jurisdiction as Mayor, and if he were to show clemency to the wrongdoer, he himself could expect no clemency from the higher officials.

To my surprise and dismay, it required more than two hours of argument to gain my point. But I persevered, and once again my prestige as an enormously wealthy man came to the rescue. Finally, after I had given my personal guarantee to shield the Mayor from all harm and arranged for the informal passage of a small fortune in "gulgul", the official decided that it would be proper to release Ardu on bail.

And at length, equipped with the green-sealed document ordering Ardu set free, I paid a visit to the lowest sub-basement. To tell the truth I was not entirely displeased with events, for not only would Ardu have learned a wholesome lesson, but she would have to be grateful to me for rescuing her. Little did I expect the reception that she actually gave me.

After passing fifteen stories below ground and walking through corridors so steamy and ill-smelling that my head began to ache, I was admitted into a little black den with an overpowering stench of stagnant air. By the pallid light filtering in through grated bars I could distinguish half a dozen forlorn figures—disreputable-looking blue-skins, with shrivelled, blasted features and wasted frames. Merely to hear them mumbling and cursing among themselves, with violent and obscene oaths, one would have wished to take flight—surely, as we would say on earth, this was no place for a lady! And yet in their very midst, cowering against the wall with averted head, crouched the lady whom I esteemed most of all.

She did not seem to see me as I entered; in fact, it would not have been easy to recognize anyone in that shadowy place.

"Come," I said, going over to her and tapping her lightly on the shoulder. "You are released on bail."

And, without a word, almost as though she had expected this very thing, she followed me out of prison.

In silence we mounted the fifteen flights (Waschu, being a small town, had not the electric shoots common in the larger cities.)

I had more than half expected her to utter some word of thanks. By the time we had reached the level I was feeling a trifle resentful at her apparent lack of appreciation.

"I had a terrible time getting you out," I confided, when at length she was starting in the direction of her rooms. "Aren't you just a little bit glad?"

"Glad? Why should I be?" she demanded, almost furiously, with a look that seemed to say, "Who are you that I should thank you, Erom Reve?"

"But you were in a frightful predicament," I started to explain. "You——"

"And who got me into a frightful predicament? Who, I'd like to know? Who, except you?" She flared, all the pent-up anger of hours finding vent in one furious explosion.

I was completely staggered. The sheer injustice of the accusation left me momentarily speechless. Then, indignantly, I started to expostulate, "But, Ardu, you don't think I——"

"Why did you leave me in that horrid place so long?" she burst forth. "Why didn't you come and get me sooner? Oh, it was dreadful! I wish you'd never taken me to this country at all!" And for an instant I thought that the tears were about to come.

And then, with one of her whirlwind changes, her expression hardened, and she cried, "Oh, well, what does it all matter? Why didn't you leave me in there for life?" "Why didn't you? Oh, I don't ever want to see you again, Erom Reve!"

And while I stood gaping in astonishment, she darted up a flight of stairs, thrust herself through a little elliptical door, and disappeared, leaving me to watch her in anger that soon gave way to black dejection.

Truly, there was sufficient cause for dejection. If my personal relations with Ardu had not been reason enough, the international turmoil she had stirred up would have been adequate excuse. In less than twenty-four hours (so swiftly do things happen in Venus) her little affray with the visiting diplomat was to assume the proportions of a universal tragedy.

THE first step was taken by the insulted official himself. Promptly he telegraphed the full story to the heads of his government, stating that he had been pummelled by a mad giantess at the instigation of the Mayor of Waschu. At the same time, he made sure of adequate publicity by giving extensive interviews to the newspaper reporters that crowded to see him. The government of Gung was evidently embarrassed and uncertain what to do; but the long accounts of the affair that began to appear in the papers, the editorial comments and the public gossiping, made immediate action necessary. And, under the circumstances, there was only one recognized course that would uphold the honor of Gung—which was to send Wultho a note demanding instant apology. Had not Gung been a small nation and Wultho a large one, she would have had no hesitation about requiring the

apology; as it was, the step seemed little short of suicidal. But Gung (not unlike her neighbors) had never been known to let common sense interfere with diplomacy; and since she had powerful allies on whom she might call in time of need, and since these secretly advised her not to swallow the Wulthonian insult, it was not many hours before an ultimatum was drafted requesting the formal regrets of the government of Wultho.

It could not have been expected that this ultimatum would be accepted (ultimatums never were accepted on Venus). The reply of Wultho—in which she proved faithful to precedent—was to assume that the insult had originated with Gung; that the mere sending of the message was an outrage not to be redeemed except with tears and blood. In a moment, the entire nation of Wultho was aroused; and, in a moment, disaster became inevitable. Newspapers at once took up the affair, demanding that justice be done; preachers grew bombastic and inflammatory; orators waxed hot in the provincial legislatures; military companies paraded ostentatiously. And meanwhile the name of Ardu Twell was on the lips of all, praised by some, cursed by others, sometimes reviled as monstrous, sometimes upheld as the symbol of womanhood to be protected against the foreign vipers. At the same time, the talk of war was everywhere in the air, and everywhere the blue-skins began to whisper feverishly of the revival of the days of blood and glory.

The rest was marvelously simple. In response to public demand, and in accordance with time-honored practice, Wultho took what was known as "firm action," and sent an ultimatum of her own. This message—which was generally upheld in Wulthonian papers for shielding the national honor—directed that Gung redeem the insult by ceding Wultho the wealthy province of Fruthum; and the time allowed Gung for a decision in this important matter was exactly ten hours. Of course, no one expected that country to yield, and even before the ultimatum had been dispatched, twenty million troops were on their way to the frontier. Yet, when the "Gulguli" of Gung (its wealthiest man and ruler) replied in conciliatory terms, requesting that Wultho be content with half a province, a great hubbub of indignation bubbled forth throughout the land of Wultho. As soon as the message had been received—or perhaps just a little sooner—the Wulthonian government issued its official proclamation of war (which, in order to save time, had been printed two days before). Simultaneously, the twenty million troops began crossing the Bulbo River and laying waste the fields, hacking down the trees, slaying the men and enslaving the women of the defenseless little country of Gung.

CHAPTER XXX

Thunderbolts

HAD the war been confined to Wultho and Gung, it would have been over in a week. The overweening might of Wultho would have triumphed; she would have crushed her neighbor in a vise-like grip. Victory, however, was not to be so easy—nor had the diplomats of Wultho expected it to be. When one drops a lighted match into dynamite, one need not be surprised if there is an explosion; and dynamite would have been safe compared with the planet Venus. To create an armed disturbance in any part of it without affecting the rest would have been as difficult as to blow up one room of a house without disturbing the occupants of adjoining rooms.

It was upon this fact that the Wulthonian war-makers had relied. They knew that, as their world was organized, small wars were certain to beget great. Among the seventy-one nations of Venus there were two great "Xinzoth" or alliances, curiously known as "defensive"; and one of these claimed thirty-six member-states, and the other thirty-one states (the four remaining states being primitive communities too insignificant to count). Among both alliances it was the rule that a country unjustifiably assailed could call upon its fellow members for aid: hence a small disturbance on any part of the planet might spread to the sixty-seven members of both defensive parties, deluging the world with fire and blood. Thus far, it is true, no more than thirty-three states had ever been involved in a single conflict, but of recent years the neutrals had found it increasingly difficult to remain aloof; and leaders of the military party were looking forward (although, of course, as a scarcely realizable ideal) to a time of perpetual disssension and universal war.

Yet the struggle between Gung and Wultho was not half a day old, when it became apparent that the ideal of the militarists was not unattainable. No sooner had war been proclaimed than the great nations of Dangrug, Blatt and Uganthu demonstratively took up arms in the cause of Gung; and their partisanship was counteracted instantly by their rivals, the maritime empires of Carla and Stadsto, which at once declared themselves on the side of Wultho. As a result, Dangrug and Uganthu called upon the members of their alliance, which responded to the number of twenty-one; and Wultho called upon the members of her alliance, which responded to the number of twenty-three; and so, within a few days, fifty-one nations were involved, twenty-five on one side and twenty-six on the other. Of the remaining members of the two alliances, all were being sorely tempted, for, as "spectator nations" or neutrals, they found their property and their territory subject to depredations by both factions and yet were not legally entitled to take measures against either. Their temporary hesitation, however, was considered sound policy, since they had not yet decided which side would offer them the most "gulgul."

Popular opinion in all countries had now been heated to boiling point. In all countries alike the enemy were being denounced as "stitzas" (foul-smelling birds akin to our own vulture); in all countries the people were beseeching victory of their god ("Gulgulogs," or "the celestial rich man"); in all countries the leaders were preaching those ideals of universal benevolence on behalf of which they were tearing one another to bits. Public meetings were being held at which the people would grow hysterical at the recital of foreign iniquities and domestic merits; public petitions addressed to the Deity were being signed by thousands of citizens, requesting the annihilation of the foe; and anthems glorifying the holiness of revenge and the beauty of murder were being sung religiously in all the "Torchas," or shrines of the devout.

In all these demonstrations, of course, the cause of the conflict was emphasized and re-emphasized. Indeed, the struggle was known as the "War of the Whiggig," after that memorable reception at which Ardu had insulted the High Councillor. And Ardu herself, as the source of the dispute, was still prominently under discussion in all countries. By the enemies of Wultho she was represented as a sort of tigress, a female demon with fire-spurting nostrils; she was regularly burned in effigy; her crimes were execrated in the press and by public orators, and her name was made the daily subject of patriotic maledictions. But to Wultho and its allies she had become a heroine. She was depicted as the champion of native rights against foreign arrogance, a defender of those principles of liberty and justice which Wultho had always

sponsored; and her action, in slapping the Councillor, gave a slogan to the war, a slogan that made recruiting easy and popular enthusiasm sure, the soul-stirring slogan, "Protect our women from insult!"

Yet, in view of the demonstrative general eagerness to protect the women, the Wulthonian treatment of the so-called "gentler sex" impressed me as singular. In all war-like activities, the ladies took as prominent a part as the men; in fact, the militarism of the Venerians was at least fifty per cent feminine. I was horrified to observe (although I had already heard it mentioned) that every young woman as well as every young man was required to make haste for the front. And whereas on this planet the women looked exactly like the men, dressed like them, spoke like them, worked like them, and acted like them in every respect, I could never reconcile myself to the barbarous practice which permitted (or, rather, compelled) young girls to go forth by the million to be maimed or slaughtered on the battlefield. I was not convinced by the argument that, in these days of advanced warfare, the men were not numerous enough for the army's needs; nor was I persuaded when told that the employment of men and women in equal numbers was a social and economic, as well as a military advantage, since it meant that, on the average, as many females as males would be slain, and the balance of the population would therefore be nicely preserved.

THEORETICALLY, all blue-skins between the ages of eight and eighteen were eligible for active service; and, theoretically, even the older men and women were expected to do duty at home. Actually, however, only those without "gulgul" were required to serve; the mere possession of a fragment of this precious substance would exempt any person from the perils of warfare. And while the express provision of the law was that all citizens should be treated equally, the unwritten law had long been that all citizens without "gulgul" should be treated equally. Sociologists and students of biology went so far as to defend this principle on the ground that the "gulgul" possessors, being the choicest elements of the population, should be preserved to bequeath their superiority to succeeding generations.

And so it was all the recruits, whom I daily saw driven out of Waschu, were "small letter men"—or "small letter women." My white friends and I were glad indeed that we belonged to the "Large Letter" class; otherwise, we should assuredly have been marched off to be slain along with the millions of convicts, vagabonds, factory workers, and other impecunious wretches. But our large supplies of "gulgul" exempted us without question; and a word from us would instantly have exempted any other person we designated. To our surprise, we discovered that the war, far from being disadvantageous to us, was positively beneficial; money became scarce, rates of interest were immediately doubled, and as a result, our income was also doubled. I felt some compunction, indeed, about profiting at the cost of the groans and blood of millions; but I observed that all other rich men were profiting correspondingly, and at the same time were being decorated for their patriotism; and I saw no way of refusing the "war gains" without risking a ruinous loss of prestige.

But I gave little thought to my gains; my vast reserves of "gulgul" had almost ceased to interest me; I was overwhelmed by the reflection that all my power had been insufficient to avert a world-wide catastrophe. What chiefly concerned me now were the reports from the battle front; and daily I perused the military announcements with an anxiety born of the certainty of impending disaster. Although the official proclamations breathed no word of anything alarming, I was convinced that somewhere the death-torch was secretly being manufactured; that somewhere it was being harbored with diabolical purpose, and waited but for the opportunity to leap forth with deadly effect. No doubt the military leaders were cherishing it as a "trump card," which they did not desire to play too soon; but that it should be used at last was as evident to me as that the war should end.

Although apparently of gigantic scope, the initial engagements of the war were mere skirmishes by comparison with those gargantuan conflicts that were to follow. In the beginning, the reports told of the steady advance of the Wulthonian army through the territory of Gung; they described how, at the battle of the Bulbo, the enemy was routed with a loss of half a million as against a mere hundred thousand for Wultho; they praised in high terms the valor of the native troops, whose bravely was extraordinary in view of the fact that they outnumbered the enemy only in the ratio of five to one. Next came the account of the siege of Cayovax, a glorious victory for Wultho, since her losses were only nine hundred thousand as opposed to almost a million for the foe; then came the stories of engagements at Tows, Quaxo, and Gubbub, all of which (if one could believe the official Wulthonian reports) were testimony to the prowess and gallantry of the Wulthonian arms.

One thing that struck me as peculiar about all the proclamations was that they would invariably report the number of combatants killed or missing, but would never make any statement as to the wounded. Prompted to inquire whether no one was ever wounded in the Venerian wars, I was informed that the injured men and women in every engagement were numbered by the thousand, but were invariably listed among the dead, for the reason that they were soon to belong to that category. From past experience, the nations had found that the care of the wounded imposed a needless expense; that the "gulgul" necessary for that purpose could be employed more efficiently in training new recruits; and that it was cheaper to make a new soldier than to re-make an old. For this reason, bevies of officers were commissioned to scour the battlefield immediately after every engagement, stabbing or shooting all survivors incapable of rejoining their companies. This, as my informer insisted, was done for humanitarian reasons, as it was considered kinder to slay the wounded than to leave them to starve to death.

CHAPTER XXXI

The Death-Torch

MY position immediately following the outbreak of war was embarrassing in more ways than one. Not the least of my afflictions was that I was forced to shine in the reflected glory of Ardu Twell. Since it was she who had started the war, and since she was known to be my guest and thought to be my kinswoman, I necessarily shared in the credit for the achievement—and in her condemnation by the foe. It was now assumed as a matter of course that I was a patriotic Wulthonian, and I was deluged with high and wholly unmerited praise for my devotion to the country's cause. I was even offered responsible military offices, which I had difficulty in refusing; I came to be so much in request as a maker of patriotic speeches, that I had to waste hours inventing excuses for declining; I was made the object of insistent demands for military investments, and these I could not refuse, though I desired to do nothing to aid the war. (But

from my private point of view they proved most profitable, paying enormous rates of interest.)

Meanwhile I had seen nothing of the actual originator of the war. My sensibilities had been wounded by her repeated taunts and rebuffs; I felt injured by her unjust treatment of me following her release from jail; and, not wishing to make myself the target of further blows, I was determined not to seek her until she sought me. But that, apparently, she was resolved not to do. The days went by, and I caught not a glimpse of her; she seemed bent on hiding securely in her iron apartments. Gladly, had my smoldering indignation and my pride permitted, would I have rushed to her and sought to smooth away our misunderstandings; gladly, had her own feelings allowed, would I have taken her in one long oblivious embrace and soothed away our troubles and forgotten them. But that blissful consummation was evidently not to be.

Yet I did receive some slight evidence that she was relenting. "Have you noticed Ardu of late?" Daolgi asked one morning, in a casual way. "I've never seen such a change come over anyone."

"Why, what's the matter?" I inquired, eagerly, although I wished not to betray too much interest.

"Oh, nothing definite so far as I can see," stated the poet. "But you know how gay and vivacious she used to be. Now all the spirit seems to have gone out of her. Why, I can hardly get her to talk at all. She just mopes around listlessly, as though the sorrow of the whole world were on her head."

"Well, in a way, the sorrow of the whole world is on her head," I commented, pointedly.

And that was the last we mentioned of the matter. But I had had fruitful cause for wonder, and also some vague reason for hope. Pride still forbade me to seek Ardu, but I suspected that she would be less haugty when next we met.

Yet the passing days brought me only cause for anger and despair. It was to be some time before I realized fully how cataclysmic was the disturbance Ardu had started. . . .

After the first ten days, reports from the battlefront became briefer and more enigmatical. Officially it was stated that the army was engaged in maneuvers which, for strategic reasons, could not be described; unofficially, it was rumored that the Wuthonian troops were fleeing before reinforcements from Gung's powerful allies, Lullum and Torrie. But the unofficial announcements never became louder than whispers, since it was a capital offense to be caught making any unfavorable comment on military matters.

At the same time, the government proclamations began denouncing, in violent terms, the "barbarity" of the foe. In a military commandment perhaps not meant to be taken literally, the people were ordered to drink vitriol every morning before breakfast, so as to maintain a proper state of hatred; and every one disobeying this mandate was threatened with imprisonment. "No honorable citizen," declared the official document, "can fail to be outraged at the tactics of foes that respect no law or justice or humanity. Their latest infamies are without parallel in the history of civilized murder. Not content with blowing their enemies to bits in the time-honored way, they have availed themselves of an engine that deals death at great distances by means of the power of light. Two of our brigades have already fallen victims to this nefarious device; and a reconnoitering party has descended upon the Village of Glargo, near the boundary-line of Gung, and there slain the ten thousand inhabitants. For this atrocity there is no justification either moral or military, since the Code of World-Wide Law (which our foes have repeatedly and perfidiously violated) expressly states that civilians are to be slain only when their removal facilitates the army's advance."

What the official announcements did not mention—and what was brought accidentally to light not much later—was that it was the Wulthonian army that had first employed the death-torch, and that the indignation of the leaders was ascribable to the discovery that the foe was equipped with the same weapon. Certainly, there was cause for indignation, for the death-torch was to prove decisive in the war, and was not only to nullify all prearranged plans but was to enshroud the planet in ashes.

THE first intimation of general calamity occurred when a fleet of gigantic "Stidlas" or air-cruisers arrived by night in the vicinity of the great Wulthonian manufacturing city of Krazz. Of the coming of this squadron there was no sign, for the machines moved noiselessly and at a speed of several miles a minute; and noiselessly the thousands of warriors disembarked. Each equipped with a death-torch, they invaded the streets of the slumbering city, penetrated every gallery of the iron buildings and every subterranean corridor, and zealously slew the defenseless, terrified inhabitants. Some resistance, of course, was offered, and the invaders, outnumbered a hundred to one, could not expect to go unscathed; yet, when at last the survivors returned to the waiting fleet, the corpses of the natives lay strewn by the million among the dark galleries and silent thoroughfares of the town.

It did little good for Wultho to retaliate by sending an air-fleet to the city of Argo in the country of Lullum, and wiping out its fifty-two million inhabitants; and it was palpably stupid to order another fleet across the seas to Uganthu, and to annihilate the population of its most important province. In revenge for her losses, Lullum converted the Wulthonian city of Aarbec into a graveyard; and, in return for her irreparable wounds, Uganthu pounced like a beast of prey upon the capital of Wultho, ferreting out its inhabitants to the last woman and child, and smiting them all with the irresistible rays of death.

One might have thought that at this point the carnage would have ended, for certainly, if one gleam of intelligence had lighted the sluggish minds of the blue-skins, they would have perceived that they were committing international suicide. But no such thought seems ever to have penetrated those irrational brains; or, at least, all blue-skins expressing such thoughts were swiftly and effectively silenced. For the Venerians were not less vicious and not less blind than those barbarians that infested the earth three million years ago; and, like those barbarians, they seemed incapable of controlling their blood-lust. Having depopulated half a dozen great cities and several provinces, they appeared to vie with one another in ravaging other cities and other provinces; they appeared almost to be playing a sort of mad and reckless game, a murderous world-wide game wherein the umpire was the death-torch. Almost daily we received news of the destruction of some new city, the death of millions and yet other millions—though, when the announcement told of disaster to some native town, it would be met with oaths and groans or with a surly silence; and when it told of calamity to the foe, it would be greeted with vociferous applause.

It was when three quarters of the population of Wultho had been exterminated, and more than three quarters of the total population of the world had been blotted out, that my fears for the planet at large gave place to my first acute dread for myself. As yet this particular part of the continent had not been molested, and as yet the cities in the vicinity were swarming

with life; but persistent rumors gave warning that the still-powerful nations of Blatt and Uganthu were planning a joint attack with our own region as the focus. Needless to say, neither I nor my friends were anxious to witness the onslaught—but what possibility was there to escape? To flee would be futile, since one part of the land was no safer than another; to hide would be impossible, since there was no nook or cranny of town or country that the invaders could not penetrate with the all-illumining rays of the death-torch. Our one hope of safety lay in the projectiles which I had recently completed; but as yet I had been unable to establish communication with the earth, and without such communication, the projectiles could only serve as our tomb.

Besides—and this was all-important—there was only one moment at which the projectiles could be available; and that moment, which would make possible our flight home in a minimum of time, would occur shortly before the earth's next conjunction with Venus. Anxiously I anticipated that fateful hour, and unceasingly I experimented with the radio, increasing its range gradually, yet never certain of securing the requisite power. As the long awaited time drew near, I hardly dared to sleep or eat, so eager was I not to waste a moment; yet all my efforts seemed unavailing—and when but twenty-four hours of grace remained, I was convinced that no response from earth would ever come. Then it was that there occurred those swift and ghastly events which were to mark the dread climax of our sojourn on the planet.

Not ten yards remained to our goal . . . when suddenly, full in our faces, we beheld the glaring white beams of a searchlight! Wild with terror, we leapt to our feet . . .

I remember awakening one night with a cry of terror—terror from the depths of the most hideous dream I had ever known. Even after the passage of years I can recall that nightmare minutely: it seemed that I was floating in an open space filled with flying creatures, creatures distorted and horrible, monstrous as the goblins out of fairy tales and gigantic as the ancient dinosaurs of earth. In innumerable troops and squadrons they flew, with wings loud-flapping against the sky of red and black; and some came lunging malevolently at me with crooked eagle beaks; and some came heavily striking with enormous blood-dripping talons; and some glared wickedly with dull eyes like bleeding flesh, or breathed upon me foully with breath of poison and decay. And as they hissed and thundered, screaming like angry gulls and rattling and droning like motors, it seemed to me that out of each bestial shoulder sprang a long steel-clad human arm; and on each steel-clad hand there appeared to stand a multitude of pygmy men and women, fringed with all fair things I had ever known: flowers and harps, paintings and lovely books, all veiled in a whirling golden mist. But in a flash the fair things were streaked with crimson stains, and in a flash the crimson spread to the faces and garments of the people; and with louder cries and a gnashing of teeth and a crunching of bones, the jaws of the monsters closed over the men and women. And there was a tremendous beating of wings, and in uncontrollable terror I shrieked—and found myself alone in my own room.

Even after I was fully awake, the horror of the nightmare would not leave me. I could not free myself from the remembrance of evil, flapping wings; it almost seemed that I heard those wings now, saw them heaving grotesquely from the frames of flying dragons.

The horrid thought became strangely an obsession and I could not cast it aside; and as I lay there in a sort of cold sweat, gripped by an irrational dread that deepened as the moments drifted by, I was half convinced that the dream had been reality and that somewhere in outer space those dread monstrous wings were circling against a darkening sky of blood and shadow.

Yet all about me the night was still and untroubled. Scarcely the rippling of a breeze, scarcely the trembling of a sound broke the moonless silences. "Surely," I argued with myself, "I merely let my imagination delude me; surely there can be no reason for alarm." Yet, urged by some unaccountable impulse, I arose from my couch and stepped over to the window for a glimpse of the skies—a glimpse that I found very necessary to assure me that all was well before I once more sought slumber.

But there was to be no further slumber for me that night. At first, as I glanced listlessly from my window, all things seemed serene—above me the stars shone calmly, beneath me the town slept in shadowy quiet.

After all, my apprehensions were no more than the work of my overwrought fancy; the first light of day would reveal how absurd they were. Laughing disdainfully at my own folly, I was just about to withdraw into my room when a startling spectacle caught my eye.

Almost directly above me, and in the heart of the Milky Way, the stars seemed blotted out by a small cigar-shaped patch! And while I asked myself what apparition this might be, I noticed that the patch was moving! In the same second it came to me that the patch was not alone but was one of scores—scores of night marauders like the flapping dragons of my dream!

CHAPTER XXXII

The Final Assault

FOR a moment I stood transfixed, gazing in speechless fascination at the slow-drifting black patches that moved like specters against the background of skies. Then sudden action warmed my frozen limbs, and like a madman I dashed out of the room and down the dark corridor to my friends, breaking into their sleep with loud cries and warnings. Still but half awake, they stumbled to the window, to behold the black night-ghosts, not by the score but by the hundred! "The death-torch," Daolgi muttered in terror. "A goblin army with the death-torch!" But before he could utter another word I had flitted out of the room and had pulled an electric switch that sent the alarm clanging in every hall and chamber of the town.

A minute later all was tumult and swarming activity. Groping through the darkness (for they dare not reveal themselves to the foe with lights) the blue-skins crowded toward my rooms in dense masses, with excited oaths and whispers and terrified questionings. So great was their agitation, that it was impossible to answer them in words; I merely pointed to the window, and they jostled and pounded one another for a glimpse of the skies. One glimpse sufficed—the spectators were panic-stricken. The dark moving shapes had become almost invisible—but how much more appalling than before! From many of them—or from where I judged them to be—long streamers of white light stretched downward, long conical streamers that widened from a minute glaring focus. And those streamers swept the skies constantly and with deliberate slowness in great loops and spirals—the searchlights of the descending foe!

In trembling dread I sought the Mayor; and, in excitement that matched my own, the official pressed a succession of electric buttons that sent the alarm flashing to every nearby town and military encampment. "Reinforcements will be here by morning," he assured us, in frantic tones, and then turned to the immediate business of defense.

On the roofs of all the buildings squads and companies of soldiers established themselves with aerial guns and ammunition. And once the town had been located by the enemy—which was after the first few minutes—the earth and the air and the iron buildings themselves were shaken by thudding, thundering detonations that pealed and rumbled unceasingly.

And unceasingly white lights and blue and red streaked across the agitated skies. Sizzling rockets of green and gold were shot to immeasurable heights and burst in rainbowed constellations of sparks; countless lightnings of carmine or yellow were hurled zigzag downward by invisible foes and vanished without effect; bombs boomed all around us with angry flares and noisome odors, scattering the defenders and yet leaving the iron towers untouched. Once—at a point where all had been black an instant before—a crimson blaze sprang forth at a prodigious height, illuminating the heavens like a meteor of rare brilliance, and like a meteor flashing back into darkness—an enemy craft that would molest us no more!

Had the foe been able to reach us with the death-torch, the conflict would soon have been over. But that infernal weapon was useful only when in contact with the ground; and the invaders must alight before accomplishing their deadly ends. Therein lay our salvation. At night-time and under the fierce defensive fire, a landing was difficult, if not impossible (at least, within a distance of twenty miles, the range of the guns). And so, as the terrible dark hours dragged

by, we found that the foe threatened us only from the remote heights; and when the first pale gray of dawn began to overspread us, we still had not faced the dreaded attack of the death-torch. But miles away, across the undulating plains to westward, we could observe multitudes of monstrous dark bodies, with cigar-shaped frames and wings like giant bats, which settled slowly into the fields as though in readiness for the final assault.

Even as they dropped to earth, there rang forth a roar of relief, almost of triumph, from the assembled watching blue-skins—and far to the west, low against the horizon, we could observe a swarm of little black dots, inconspicuous at first, but rapidly growing to bewildering proportions. Through small telescopes Daolgi and I watched as they developed from dust-points to oblong frames like those of the descending air-liners. "They have come! They have come!" cried the people, in tumultuous excitement. "The army has come to save us!"

Certainly, it seemed as if an army had come, for the advancing craft were countless as a swarm of locusts. At a speed outracing the storm-clouds, they drew near, now high in air, higher than clouds. And as they sped forward, little spurts of blue light shot down from them toward the opposing fleet, and from the opposing fleet other spurts of light shot upward; and several of the approaching ships burst into bright flame, and fell to earth in twisted, smoldering heaps. Then suddenly, from the sides of all the newcomers, torrents of black smoke began pouring; and in a moment the smoke had reared an impenetrable wall between the two fleets; and under cover of that wall, the defending ships began to alight, so that, by the time the smoke had lifted, all the Wulthonian air-cruisers lay safely on the ground.

NOW began the real battle—a battle that was at once the most spectacular and the most terrible ever witnessed by civilized beings. Out of both fleets the warriors poured in ant-like multitudes, so closely packed that, as I surveyed them through my telescope, they seemed a solid mass; and behind the rises in the rolling land both armies secreted themselves and their air-cruisers. At first I thought that the battle was to be a mere endurance test, for both factions had installed themselves in positions inaccessible to the foe—yet, as I was to learn, it was to be more nearly a test of numbers. Suddenly, as though at a prearranged signal, the invading troops swept from their strongholds in a long succession of living hexagons, gliding toward their foes with the speed of flying wild-fowl. Surely, I thought, the Wulthonian army was to be stamped out! Yet not a movement, not a sign of life came from the imperiled forces—it was as though they had not even noticed the assault. Still the foe swept on, and now they had not two hundred yards to cover, now not one hundred, now not a bare fifty—when a fierce wave of green light leapt toward them, passed them, and vanished lightning-like in the distance—and the charging troops were to be seen no more. But upon the ground a multitude of stony shapes lay sprawled haphazard.

The loss of these soldiers seemed to make little difference. The remaining combatants appeared as numerous as ever; the lines of both belligerents were black with life. And that life, apparently, was meant to be spilled like water. Regardless of the fate of their foes, the Wulthonians undertook a counter-attack, and in dense hexagonal ranks, their troops advanced—only in their turn to succumb to a destructive wave of red light.

"Strange," Daolgi remarked to me, "that light, the source of growth and beauty and of life itself, should be the means of destruction and murder." But I paid no attention to his words. My eyes were riveted too firmly upon the battlefield. I was watching how, from the Wulthonian retreat, the green light was bursting forth in continuous sheets and flashes, cutting into the very soil and tearing through the enemy defenses as through walls of paper. But from the Uganthians (the invaders were Uganthians) the red light was volleying in a succession of quick streaks and wide waves, ripping up earth and rock as it dug its way to the foe. And green and red, with interplay of swift streamers and sparks and smoldering meteor furrows, lighted up the heavens weirdly till the sun himself, retreating in shame behind the gathering clouds, seemed a luminary of no importance.

Straight through stone and clay and gravel plunged the terrible rays, diverted in their course only as sunlight is diverted by clear water; straight to innumerable living hearts they flashed, smiting them as sharp gales smite yellowing leaves. By the hundreds, by the thousands, by the scores of thousands, the soldiers of both sides were being shrivelled to death; yet no effort was made to check the carnage. Faster and ever faster flew the green rays and the red, filling the heavens with denser beams and brighter coruscations; singly and in groups and multitudes the afflicted ones dropped to earth, till their bodies lay massed in high black heaps whereon their fellows trod and clambered. . . .

As the battle progressed, the Wulthonians seemed to be suffering even more frightfully than their foes. Perhaps the opposing death-torches were deadlier than their own; perhaps the defenders were outnumbered overwhelmingly; perhaps it was mere luck that favored the enemy; at all events, the hour came when the native troops wavered and seemed in danger of annihilation. Even from my great distance, I could observe that their lines were thinner and not so black as before; from moment to moment I could see masses of their men (or, rather, of their men and women) withdrawing to the shelter of hillocks further removed from the foe.

At the same time the Uganthians were pressing continuously forward, sometimes sacrificing whole dense columns in their eagerness, yet gaining as much ground as their adversaries lost. And the advancing brigades, in token of victory, displayed slabs of the purple glass that was their national emblem, while the red glass insignia of Wultho became ever more inconspicuous. . . .

Now there came to my friends and me the acute realization of our own peril. Having exterminated the defending forces, the Uganthians would aim their bolts at the towers of Waschu. Daolgi urged that we flee at once to the wilderness—but I knew that no wilderness would be safe from the merciless light of the death-torch. Yet I also knew that no place could be more unsafe than Waschu. And it occurred to me that the headland some miles to the east, where the interplanetary projectiles lay in waiting, might offer relative security. I urged my friends, accordingly, to waste no time about seeking this shelter; I warned them that a minute's loss might prove fatal. Meanwhile I myself wished to remain at Waschu, clutching at a final hope—a forlorn hope, and yet all the hope we had. While the armies still writhed and wrestled dragon-like beneath the lightning-streaked skies, I hastened to my laboratory, and busied myself for the last time with the radio. The chances of success, I knew, were not great, yet they were somewhat more promising than ever before; but the reply, if it came at all, must be received within a few hours; and if we were ever to leave this planet, we must escape by midnight.

All my friends had accompanied me to the laboratory, forcing me into excited arguments while desperately I worked at the radio. None of them wished to seek

safety, while I myself remained here in peril. But their objections merely angered me—what good, I argued, could they do me by endangering themselves? In fact, their presence would only imperil me still further. And I was so vehement in my insistence, so determined that they escape, that they were literally forced to accede. One by one, unnoticed and in silence, they hastened away across the fields to the east of Waschu and into the wilderness, until at last they were all gone—all, that is, except two. The first to remain was Daolgi, who, after all our adventures together, resolutely declined to desert me on what was perhaps to be the final adventure of all. And the second to refuse to leave was none other than Ardu Twell.

Several times, during those tempestuous hours, I had caught glimpses of her as she stood staring white-faced toward the battlefield. But, as always of late, she had avoided me; and, as always, my pride forbade me to speak to her. Now, however, when almost all the others had left and she still stood peering as in a daze toward the flashing western plains, I ventured to approach her, and to suggest, "Better hurry, leave now—or it will be too late."

And, with moist, suffering eyes, in which there was something like humility, she turned to me, and said, simply, "I am not going to leave—until you do." The words were spoken in low, unassuming tones, but there was firmness in them, and I knew that her decision was not to be shaken.

"Very well—any way you wish," I muttered, and turned once more to the radio. At any other time her words would have thrilled me with delight; but now, in our mortal peril, I had no time for sentiment.

"I am sorry, Erom—very, very sorry. It is all my fault; I know it. Will you ever be able to forgive me?" These were the words that came ringing like music in my ears as I toiled over my electric tubes—or were they but the figments of my fancy? One glance at Ardu was all I could spare from the radio—but one glance was enough to reassure me. Her eyes shone with a warm, almost tender light—and sudden joy came to me, and the sudden vivid desire to escape with her from this death-trap.

"It is good of you to remain here," I said. And a quick happy gleam in her eyes was as the signal of renewed understanding.

BUT I had no time for her just then. The radio occupied me exclusively. For hours, after the others had left the room, I labored in harrowing anxiety, my growing terror lending haste to my movements, as through the half-shuttered windows I caught glimpses of the flaring and flickering heavens. It seemed that the green flashes and the crimson were becoming brighter, more frequent; that the menace was drawing nearer, nearer each instant—that my moments of grace were numbered. Would the longed-for message leap through the millions of miles and reach me in my moment of need? As I bent over my batteries and wires, uttering frenzied appeals that I hoped should be heard on earth, I felt despair gradually stealing over me; and my thoughts of rescue were those of the drowning man who clutches at a straw. Meanwhile, the spectacle outside was so dazzling and so ominous that I could hardly keep eyes on my work. Now the red light seemed to have snuffed out the green, and in a succession of long waves, like the billows of an inverted sea, it rolled across the clouded heavens; now low thunders seemed to be brawling in the distance, and a faint, far-off, sizzling sound came continuously to my ears; now the whole firmament was illumined by an eerie phosphorescence, and the streamers that shot across it had an unearthly brilliance as of fresh-spilled blood; and now, in utter weariness and utterly hopeless, I sank to the sawdust-sprinkled floor and clasped my hands distractedly over my eyes, seeking no more than to shut out the nightmare vision of this doomed world. . . .

"Erom Reve, is that you?"

I leapt to my feet like one who has seen a ghost. Had the words been real, or had I only dreamt them? The tones had been faint and unfamiliar, and had come as from a tremendous distance—yet the voice had been the voice of one of my own race!

"Erom Reve, is that you?"

Speechless, bewildered, I listened. "For three years, Erom Reve, we have heard no word of you, and we have long thought you dead. Answer! Tell us if it be you!"

There could no longer be any doubt! At last, a message from the earth!

In that first overwhelming burst of amazement and relief, I could not control my emotions. Tears came to my eyes, tears flooded my cheeks in a quick torrent; my shoulders shook and heaved; I was weeping like a child.

It was in this unsightly condition that Ardu and Daolgi found me a moment later when they came bursting into the room. "The Uganthians," they started to exclaim in one voice, then broke short, observing the state of my cheeks and eyes. But the news they bore was too vital to hold back. "The Uganthians," breathlessly continued the poet, "the Uganthians have won the battle! They've driven back all the defenders—wiped them all out! They're coming now! Quick! We must hurry—escape!"

At this point the unknown voice quivered forth once more. "Erom Reve, is that you? And is that you, Daolgi Kar? For months we have heard your messages, but you have never replied to ours. Answer, that we may know it is you."

And as Daolgi gazed in utter astonishment into the tin horn whence the voice proceeded, I could not keep from sudden laughter, for Yap Yap, who had followed his master into the room, began barking furiously at the Unknown!

Then, as sheets of blue light commenced to tremble through the skies in company with the crimson, I hurriedly sent a message back to earth. "It is we, Daolgi Kar, Erom Reve, and twelve other lost explorers. We are in mortal peril; we will try to start back to earth at midnight. Be ready for our instructions, that you may guide us homeward. And make haste about your answer—in heaven's name make haste!"

"How long should it take for a reply?" demanded Daolgi, as he gazed shuddering toward the distant plain, where dense masses of warriors were approaching beneath the flashing skies.

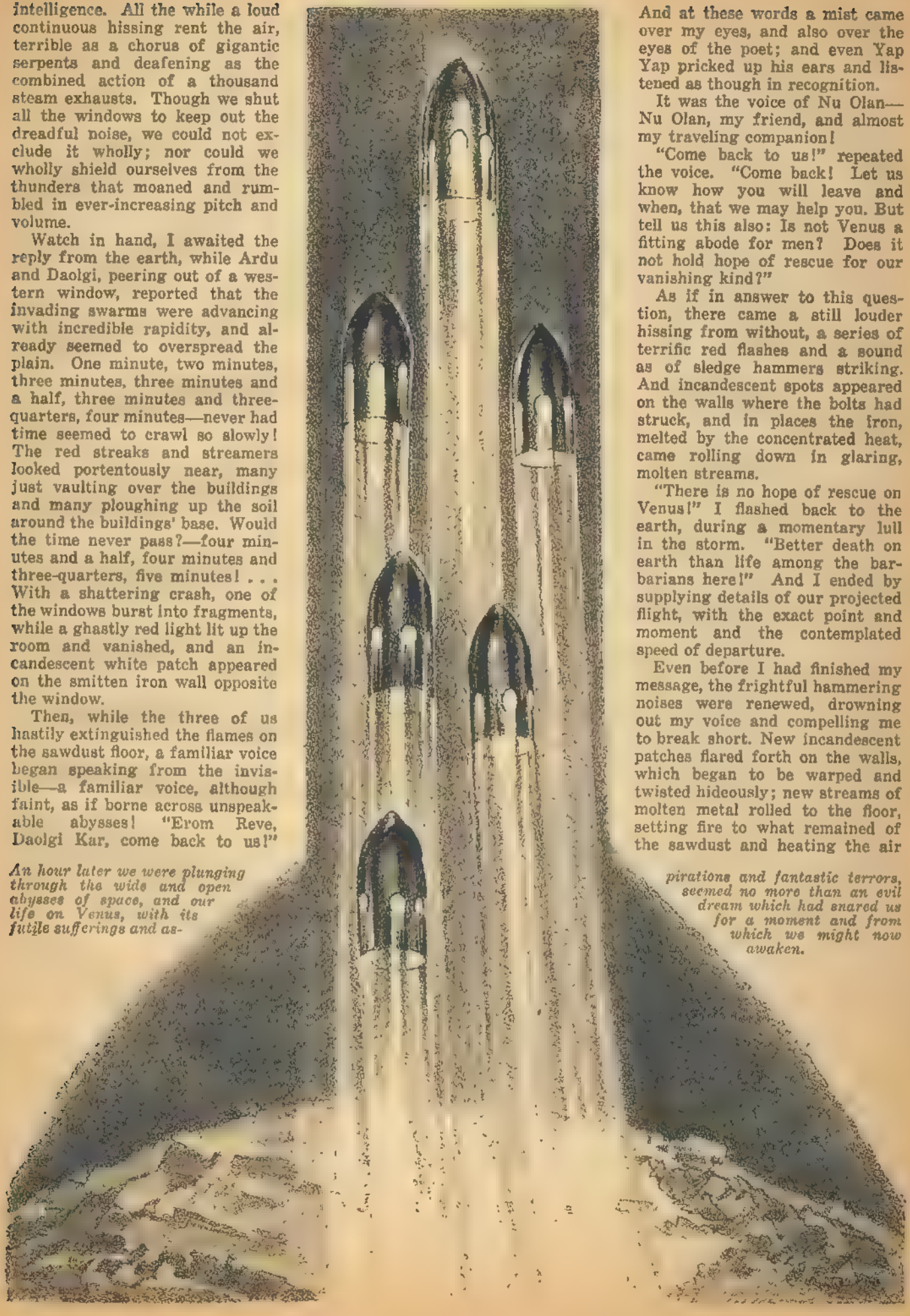
I performed a rapid mental calculation. "A little less than six minutes," said I, basing my computations on the speed of light. And Daolgi groaned, and muttered that in six minutes we might not be capable of receiving the message.

Before the six minutes were over, I had cause to fear that he was right. Gazing through a window facing east, we would observe the natives of Waschu, adults and children alike, scrambling out of their dwellings like rabbits out of a burrow, and disappearing panic-stricken amid the thick brush. But not all could reach the brush; many would throw up their arms in agony and fall in their tracks while razor-blades of red light flickered past them. And many, after reaching the brush, were cut down by the fatal beams, which withered away the shrubbery like gossamer, and went plunging after its victims as though with a diabolic

intelligence. All the while a loud continuous hissing rent the air, terrible as a chorus of gigantic serpents and deafening as the combined action of a thousand steam exhausts. Though we shut all the windows to keep out the dreadful noise, we could not exclude it wholly; nor could we wholly shield ourselves from the thunders that moaned and rumbled in ever-increasing pitch and volume.

Watch in hand, I awaited the reply from the earth, while Ardu and Daolgi, peering out of a western window, reported that the invading swarms were advancing with incredible rapidity, and already seemed to overspread the plain. One minute, two minutes, three minutes, three minutes and a half, three minutes and three-quarters, four minutes—never had time seemed to crawl so slowly! The red streaks and streamers looked portentously near, many just vaulting over the buildings and many ploughing up the soil around the buildings' base. Would the time never pass?—four minutes and a half, four minutes and three-quarters, five minutes! . . . With a shattering crash, one of the windows burst into fragments, while a ghastly red light lit up the room and vanished, and an incandescent white patch appeared on the smitten iron wall opposite the window.

Then, while the three of us hastily extinguished the flames on the sawdust floor, a familiar voice began speaking from the invisible—a familiar voice, although faint, as if borne across unspeakable abysses! "Erom Reve, Daolgi Kar, come back to us!"



An hour later we were plunging through the wide and open abysses of space, and our life on Venus, with its futile sufferings and aspirations and fantastic terrors, seemed no more than an evil dream which had snared us for a moment and from which we might now awaken.

And at these words a mist came over my eyes, and also over the eyes of the poet; and even Yap Yap pricked up his ears and listened as though in recognition.

It was the voice of Nu Olan—Nu Olan, my friend, and almost my traveling companion!

"Come back to us!" repeated the voice. "Come back! Let us know how you will leave and when, that we may help you. But tell us this also: Is not Venus a fitting abode for men? Does it not hold hope of rescue for our vanishing kind?"

As if in answer to this question, there came a still louder hissing from without, a series of terrific red flashes and a sound as of sledge hammers striking. And incandescent spots appeared on the walls where the bolts had struck, and in places the iron, melted by the concentrated heat, came rolling down in glaring, molten streams.

"There is no hope of rescue on Venus!" I flashed back to the earth, during a momentary lull in the storm. "Better death on earth than life among the barbarians here!" And I ended by supplying details of our projected flight, with the exact point and moment and the contemplated speed of departure.

Even before I had finished my message, the frightful hammering noises were renewed, drowning out my voice and compelling me to break short. New incandescent patches flared forth on the walls, which began to be warped and twisted hideously; new streams of molten metal rolled to the floor, setting fire to what remained of the sawdust and heating the air

to a torrid temperature. Through glowing, ghastly holes in the iron we could catch glimpses of the plain beyond, with red flashes coming faster and faster and the swarming legions approaching at terrible speed. In solid hexagons they came, their foot-rollers bearing them forward with steady, gliding velocity; and from northern horizon to southern they spread, an uncountable multitude, black as the black purpose of which they were the messengers.

"Come," said I to my waiting friends, my voice scarcely heard amid the hissing, rattling din. Accompanied by Yap Yap, we hastened down the iron stairs to the foot of the building and there stood hesitating in terror. Sunset was already smearing its bloody sleeves across the western clouds, a sunset less red than the intermittent death-dealing flashes—should we await the shelter of night, or risk all in an immediate dash for safety?

From far behind us, during a brief break in the thundering, we could hear a sound more ominous than the battle noises—a sound like a hoarse roar, a chorus of innumerable voices, the guttural cheering of the advancing hosts!

ABRUPTLY our hesitation ended. At a sprint we set off across the open spaces toward the thick brush to eastward. Would we reach our goal? Would we be seen and smitten down like hunted hares? We had almost gained the relative safety of the bushes, were almost convinced that we should not be observed, when a blinding blade of red light flashed just ahead of us, shattering a great rock to fragments. Instinctively, I dropped flat on the ground; instinctively, Ardu and Daolgi flung themselves to earth; and even Yap Yap crouched down in a little black heap and did not stir.

Until the crimson twilight had deepened into blood-shot night, none of us dared make a motion. The enemy was already in the town we had left; we could hear them screaming and bellowing not a hundred yards away, and an occasional burst of crackling laughter was borne to us when the hissing of the death-torch momentarily waned. The final lingering ray of sunset —the last sunset we should ever behold on Venus!— had already fluttered out when we attempted once more to escape. Very slowly and cautiously we moved, crawling as though we had been serpents instead of humans. Only fifty yards separated us from the sheltering bushes—yet that short distance seemed an impassable gulf. Minutes went by, many minutes, and at a snail-like gait we approached our goal. . . . Not ten yards remained . . . when suddenly, full in our faces, we beheld the glaring white gleam of a search-light!

Wild with terror, we leapt to our feet. Desperately we hurled ourselves toward the bushes. At the same time, a red light flickered just over our heads and a hot wind blew by us. Then another flash seared whole patches of the bushes to cinders. Then, to my confusion, I found myself plunging down a steep descent, hurtling head over heels into vacancy. And, with a violent splash, I was deluged in cold, flowing water.

As I regained my equilibrium, slightly bruised and greatly shocked, I found that I was standing three feet deep at the brink of the river—the wide river that flows by Waschu. Near me stood the dripping Ardu and Daolgi, and not a dozen paces away was the dim form of Yap Yap.

Then, as I stood shivering in that sudden cool bath, a saving idea occurred to me. Words were impossible, but I motioned to my friends, and slowly we made our way out of the water, and turned seaward along the river, whose abrupt and beetling banks hid us from the foe. With tormenting difficulty we pressed forward; frequently we were compelled to wade and once or twice we were forced to swim. But no rays of death pursued us now, though in the heavens the red lightnings gleamed and flickered, shot across at times with streamers of blue and purple, and accompanied always by a low rumbling and a vibrant, unearthly hissing. Except for the flashes in the sky there was no light to guide us as we tore our way through brush and water and along rocky beaches; yet the watch that swung from my wrist testified that we had not a minute, not a second to waste. Midnight was already dangerously near and we must escape by then or not at all.

How we completed our journey through those miles of rock and thorn and darkness is a question I shall not attempt to answer. Somehow, wretchedly weary and yet never daring to rest, we stumbled on to our goal; somehow, by the ruddy light of the shuddering heavens, we located the enclosure where the projectiles awaited us, and there found our friends anxiously watching for our arrival. And with their aid we lighted that fuse which, after ten minutes, would release the interatomic blast and send us all careering earthward.

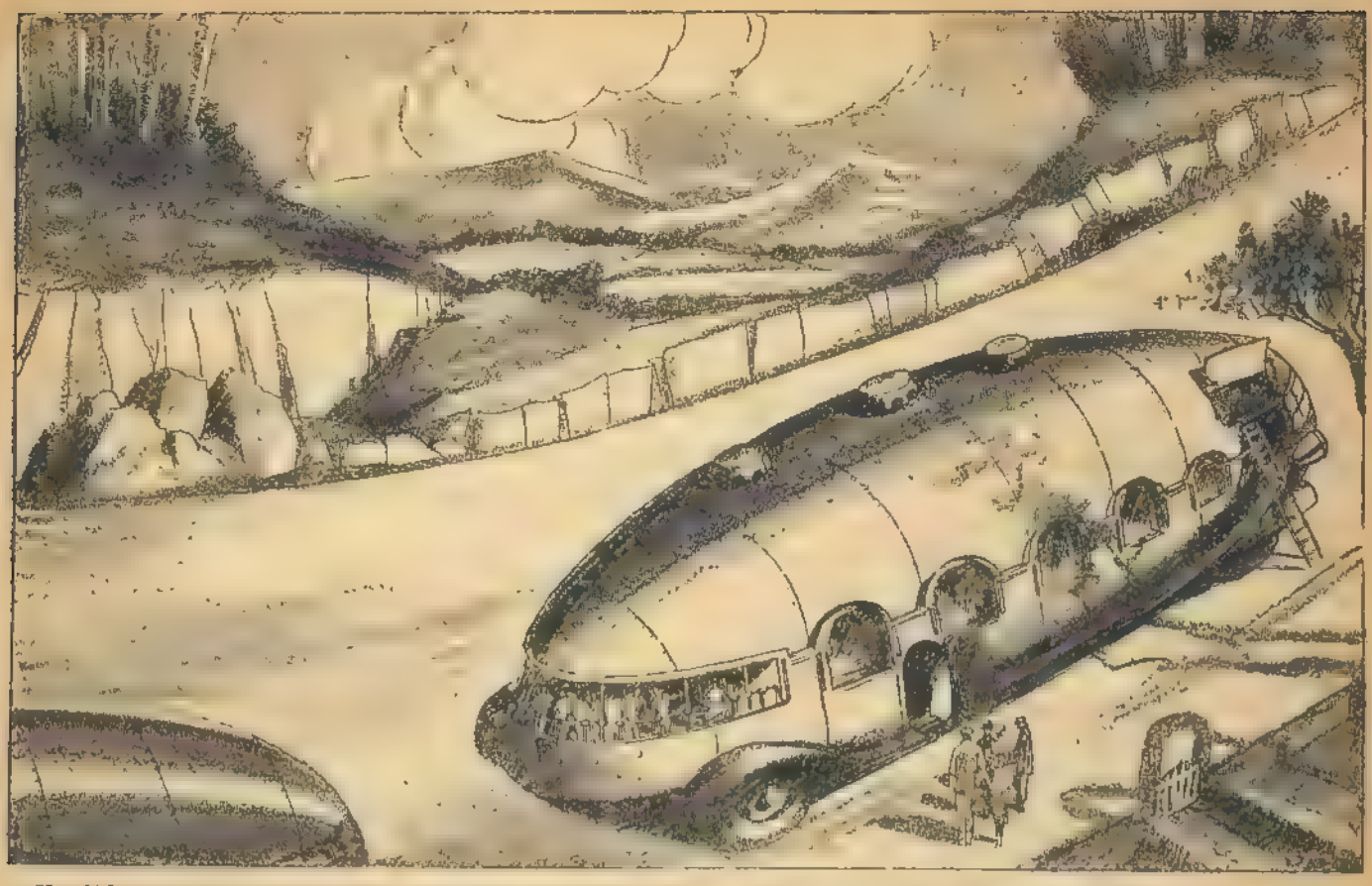
As we set fire to the fuse, I cast one last glance at the world we were leaving. To the east rolled the ocean, its waves rising and falling and rising and falling in an everlasting sad unrest like the aimless billowy life of this planet; to the west, across the wilderness toward Waschu, vivid red flames were flaring in a long wavering ragged line, capped by high funnels and twisted spirals of dully glowing smoke, crimson smoke that seemed to smolder with the very life-blood of the world. But above us the clouds were utterly black and morose, and their bleakness was broken only by the weird red lightnings, now becoming more casual and fugitive and gradually dying out.

"I'll see you on earth," smiled Ardu Twell, as she hastened off with Zara Holque toward the projectile reserved for them. And in her glistening eyes was promise of that which would make the earth seem a rare planet indeed.

An hour later we were plunging through the wide and open abysses of space, and our life on Venus, with its futile sufferings and aspirations and fantastic terrors, seemed no more than an evil dream which had snared us for a moment and from which we might now awaken.

THE END.

Watch for the Next AMAZING STORIES QUARTERLY



He did not smile as the relief car passed his disabled one - until the other came to a stop, too.

Half-Mile Hill

By David H. Keller, M. D.

Author of "Revolt of the Pedestrians," "The Eternal Professors," etc.

IT is necessary, nowadays, to go many miles away from civilization, to get to a quiet, restful place in the country. The automobile has made so many otherwise out-of-the-way places easily accessible, that the noise and din of the motor follow humanity everywhere. Dr. Keller, obviously, has been thus annoyed. He suggests a solution to the noise problem in the country—but more than that, he might be giving some big railroad companies who are suffering from bus competition, an excellent idea to be applied in overcoming this trouble. His plan is, as usual, quite ingenious.

"GET out of the way!"

"If you can't drive the old bus, get out and let some one drive her who knows how!"

"Step on the gas! We want to get home some time."

These were but a few of the angry remarks hurled at the driver of an Ocean-to-Ocean bus, who had allowed his car to become stalled at the bottom of Half-Mile Hill in Sclocum.

For two hundred years Sclocum had slowly grown around and upon this celebrated hill, known as the old Half-Mile. The town sheltered a group of farmers and mechanics, as quiet and sedate as the houses that they lived in. Pleasant, painted houses they were, with little plots of grass, flower beds and iron or wooden fences in front and vegetable gardens and tool-sheds in the rear. Narrow sidewalks of slate, brick, or wooden planks connected the houses and led, in every instance, to the church, the school and the I.O.O.F. Hall, the three centers of social life in the isolated town.

For nearly all of these two hundred years a dirt road had led up over the hill and through the town to disappear in the valley on the other side. Ten years before, this road had been graveled, then surfaced with asphalt and, to the astonishment of the people in Sclocum, had finally been concreted. The hill had, in the course of two hundred years, been worn down a little, but it was still steep and long enough to be known through the state as Half-Mile Hill.

In time past, horses used to walk up it, their humane drivers dropping their wagon wheels into every thank-you-mam and allowing their steeds to rest. With the advent of the bicycle, it was an unusual man who could ride from bottom to top, and the earliest automobiles simply did not try to make it, they went around the long way. But the autos became more powerful and at last were able to go up the hill on low; and there even came the time when high powered racing cars could go up without changing gears, though, of course, they made considerable noise in doing it.

Cars, however, were not frequent in Sclocum. The town boasted of twenty-seven cars and on a holiday perhaps as many as fifty passed the center of the village. One day the idlers took turns and actually counted fifty-five cars passing a certain point from sun-up to sun-down. That was something to talk about, something to set down on a piece of paper and put in the family Bible.

Then, without the taxpayers of Sclocum being consulted as to their opinions or desires, the Lincoln Highway was run through the town. Some miles of cement road were built, connecting the town with other strips, so that Pennsylvania could point with pride to the fact that the Lincoln Highway was concreted from one side of the state to the other. And from that time on Sclocum was on the tourist map.

That fact, in itself, was not so bad. Of course, the noise of the cars on Sundays interfered with the delivering of the sermon, but the tourists livened the town a little, brought some additional money into it and gave the inhabitants something to think about. There was something to do now on Sunday afternoons besides simply sitting on the front porch and trying to read. A person could count the cars as they passed. Great game! Count for one hour and multiply by twelve. It was hard for the Sclocumites to tell where all the cars came from.

Some of the cars had trouble in making Half-Mile Hill, but they all managed to reach the top some way or other. A few had to come up all the way on low, while another group, by taking a racing start, made the grade without changing gears. No matter how the car came up the hill, it made a good deal of noise in doing so, and more noise yet at the top when gears had to be changed and the former speed of thirty-five miles an hour was to be resumed.

Just about the time at which the people in Sclocum thought that the noise limit had been reached, the Interurban buses started to operate. They came through, first, one or two a day, arousing great interest in the spectators. It was thought that they were a convenience. Instead of going to Philadelphia or New York by train, all one had to do was to go to the station near the church in Sclocum, get on a bus and in four hours be in New York or Philadelphia. Much more convenient than trying to drive in one's own car, too, because, once in the city, there was no question in regard to parking or traffic.

First the transports came, one or two a day, and carried at the most, ten passengers. Then ten a day came, larger ones, and finally buses, holding fifty passengers, and even having places for the people to sleep in who wanted to travel at night. Pullmans on rubber wheels; what greater luxury could anyone desire! At last the great day arrived and white, luxuriant, enormous cars rolled through Sclocum, bearing in gold letters on their ivory sides the magic, mystical words,

OCEAN TO OCEAN

and that meant nothing less than that one could go from New York to San Francisco in an automobile just the same as one could on a train. Talk about the covered wagon! There were men in Sclocum, whose fathers had crossed the continent in back of ox teams.

The older people in the little town sighed. Occasionally one would open the Bible and take out a slip of paper, showing that on a certain date fifty-five cars had passed through from sun-up to sun-down. Old-timers recalled the fact that with the darkness had come quiet. There was no period of quiet now. Freight vans, moving vans, crazed drivers, who sought the night hours to make record drives, passenger buses, a thousand and one varieties of automobiles chugged and snorted and hissed their way up Half-Mile Hill during the night as well as the day. Men no longer thought it worth their while to count the number of cars passing their homes in an hour. Instead, they counted the number of figures they could count aloud between cars at night. One man won the prize. He claimed that he had counted twenty-one before another car came.

Sundays were bad. Holidays, like the Fourth of July and Labor Day, were impossible. On such days it was estimated that ten thousand cars went through the town. No one tried to count them any more; no one cared. The place used to be one well suited to quiet meditation. Now it was almost impossible to hear the preacher deliver his morning sermon.

It would not have been so bad had the town been built on a level stretch. It was the location on either side of Half-Mile Hill that added the final and damnable curse. Going up the hill it was a steady roar as the powerful engine drove the fifty-passengered car forward. Going down the hill it was the terrific pop and explosion as the air brakes were applied. All the cars made their share of noise on the hill, but the Ocean-to-Ocean buses easily outdistanced all their noise-making competitors.

The town was laid out two hundred years before. Most of the houses were from fifty to one hundred and fifty years old. They had been built in the age of the horse and wagon, the era of the pedestrian. At that time the road was a friendly artery of commerce. Folks drove slowly and were glad to stop their tired horses and talk for a few minutes to their neighbors working in the front yard. The houses were built on the road. The sidewalks were narrow. When the concrete was laid, the houses could not be set back; so the road went near them; too near them, when it became a fact that thirty-five miles an hour was the legal speed and that autoists were actually being arrested for slow driving. Sclocum used to live on either side of a friendly road; now a race track of snorting monstrosities ran through a town that had made one mistake, of allowing the architecture of a past century to survive.

Just when it seemed as though the limit of endurance had been reached, at least by the older people, Car No. 77 of the Ocean-to-Ocean line stalled at the foot of Half-Mile Hill. It was a good car and James Dourgan was a good driver. He had been driving cars for years and considered that he knew all there was to be known about the business. He had gone up that hill twice a day for a good many weeks and now the car stalled and simply died there, at the bottom of the hill.

He did everything he knew and that was all the good it did. Behind him the cars piled up. Traffic was heavy in both directions. He was given unlimited advice. At last he had to admit that he was beaten and sent for

a service car to haul the white monster to the side of the road. The passengers were transferred to another white car that had been sent in the emergency and, disconsolate, Dourgan sat in his car, waiting for help. He did not smile as the relief car passed his disabled one. But he did laugh a few seconds later when the other car came to a stop. That made two of the Ocean-to-Ocean fleet that were stalled there on the roadside.

But other cars joined them. Moving vans, freight vans, large trucks loaded with celery, spotlessly white cars, with milk and butter. One after one they rushed up Half-Mile Hill and came to a stop. The congestion was terrific. At one time the traffic was blocked back for seven miles. At last the State Highway Department took charge and detoured all the traffic over a country road so they could go around Sclocum and resume the concrete three miles on the other side. The disabled cars were dragged out one at a time. Dozens of mechanicians, real and amateur, surrounded the trucks and buses and tried to diagnose the trouble. At the end of twenty-four hectic hours the road was cleared, traffic seemed to be normal and the Highway Police restored the use of the road. For a few hours that afternoon all the cars went up the hill as easily as before, but, as twilight fell over Sclocum, car after car died at the bottom of the hill. All that night the hill was silent; all those hours Sclocum slept, but at the same time, tired and worried drivers, hours late on their schedule, tried in vain to find out what was the matter with engines, that but a minute before seemed perfect.

After that, Half-Mile Hill was an unexplainable Jonah. Some cars could make it and some could not. Experiments of various kinds were made, and the only results obtained were that it was practically impossible for a heavy truck or bus to go up it under any circumstances. Small cars could make it under one condition, and that was that they sneak up on the hill as noiselessly as possible. If a car could go up noiselessly and slowly, it was always sure of making the grade without engine trouble. The more noise, the less chance was there of arriving at the top.

Naturally, such a phenomenal condition of affairs could not help but arouse the interest of the engineers of the nation. Several of the large motor manufacturers sent their experts to make a study of the unusual condition. These experts at first thought that there was a peculiar atmospheric condition which stopped the motors, but that would not explain why some cars went up and others did not. At the end of all their study they were forced to arrive at the same conclusion that all the other experts had reached, and that was, that if a car went up slowly and without noise, it had no trouble reaching the top.

Sclocum became a different town. The circuitous detour was hard surfaced and, for the time being, became a part of the great Lincoln Highway. The State Highway Department promised to cement it and thus give the tourists their choice of either attempting to go through Sclocum or of easily going around it. Once again it was possible to sleep at night and even those who were a little deaf could hear the sermon Sunday mornings. Almost everyone in the town was glad, especially the housekeepers, who found it far easier to keep their houses, inside and out, spotless. In time the average automobilist took conditions at Half-Mile Hill as a matter of course. Even the guidebooks dismissed the matter, with a short warning that the hill was impossible unless the engine was so powerful that it could go up without any noise.

WHILE there were changes in the life of this little town, there were also great changes in the life of the nation. This was true of the economic life as well as of the social one. All standards of financial existence were shifting so rapidly that it was entirely possible for a man to go to bed rich and awake a pauper. Investments of all kinds were subject to the hazard of change. In no line of industry was this fact more noticeable than in the railroads of America.

Years before, stage coaches and trains of pack horses carried passengers and freight from one community to another. Then came the canals, and they drove the older and more expensive forms of travel out of existence. The railroads displaced the canals. For years they remained the only sure and rapid means of transportation. The interurban trolley hurt their business, but it could not compete, and just as the railroads were feeling sure of continued prosperity, there came the era of hard surfaced roads and automobiles.

The automobiles prospered. This method of travel had a fluidity that appealed to the average American. It was also cheap. Thousands crossed the country, stopping at night in tourist's camps; thousands, who, under former circumstances, would have paid a transcontinental line to carry them. The short ride on the trains became unheard of. Over a distance of less than a hundred miles, everyone who had a car preferred to drive it rather than to ride on the train. The railroads realized the danger of the competition and almost abandoned the local trains. They concentrated on the long haul, endeavoring to make it as comfortable and pleasant as could be. They figured that ten passengers riding a thousand miles spent more money than a thousand passengers riding ten miles, and were easier to care for.

But once again they were called upon to face new competition. The carrying of passengers had been started by automobile companies as an experiment. It was continued as a profitable investment. At first buses carried passengers short distances. They ended by going across the continent. It was the old stage coach on rubber tires, the horses replaced by tireless motors capable of driving the cars at the rate of eighty miles an hour. They had no tracks to repair, no large crews to pay, and not a very expensive equipment in comparison with the railroads. They were able to carry cheaply and at the same time comfortably and nearly as fast as the railroads.

They took the passenger trade away from the roads. They started to take the perishable freight trade away. Before this, the heavy freight was moving on the roads; household furniture, cement, lumber, in terrific loads, were making free use of the public highways.

The railroads realized that the competition was severe. They also saw that unless something was done, there would be no competition. Many railroads were so crippled financially that they took off their trains and put on little gasoline-driven cars, making one trip a day, simply to hold their charter. Millions had been invested in tracks, rolling stock, right-of-ways, and month by month, these millions were returning less and less income. Stocks were tumbling, and in many cases even gilt edge gold bonds were selling far below par. Everything in the railroad game was becoming very shaky. The investors in passenger buses simply smiled and invested more money. They had the railroads by the throat and they knew it. The competition was unfair, but when was fairness considered in the world of finance?

Under these conditions, it is no wonder that life, to the President of the X. V. and P., was one continuous nightmare. His road was remarkable for the number of share-holders whose investment in the company was small. These were people who had put all they had into one investment. If it failed, they lost all they had. They were widows, clergymen and little business men. No wonder that President Smathers felt discouraged as

he saw the curve of business done by his road steadily falling.

He was looking out of the window of his office one day. It was raining and that was just one thing more to make him feel badly. The X. V. and P. went through hilly country; when it rained there was always some extra expense necessary to keep the roadbed in safe condition. The weather did not worry the bus lines that were taking his business away from him. If the cement road overflowed and a bridge was washed out, they simply notified the State Highway Department and the road and the bridge were repaired out of State funds. It did not cost the bus lines a cent. They even had the roads kept free of snow drifts in the winter time.

It was raining and Smathers looked out of the window and felt badly about everything. If business became any duller, he might as well stop the fight and acknowledge that the road was bankrupt. At this point in his despondent thinking, his stenographer announced a visitor. Smathers told the girl to bring him in. At last he turned from the window and faced a little, middle aged man, in a raincoat and overshoes.

"Want to see me?" asked the President, bruskly.

"I think so. You see, I am one of the stockholders in the X. V. and P., and when you passed the last dividend, I thought I ought to come and talk things over with you."

"Well, sit down. If you are a stockholder, then you own this office as much as I do. Your name? Oh! Yes, seems that I remember a man by that name from Sciocum. Robins. That is it. Early Robins. Well, Mr. Robins, there is not much to tell you except the affairs of the railroad are not very prosperous. In fact, the buses are hurting our business. I guess you know of our fight? We tried to have the Interstate Commerce Commission force them to charge as much per mile as we do, so that we could at least have a chance for our share of the trade in fair competition. We failed. They are underselling us in every department. I think that they are going to take the freight business from us just as they have taken the passenger business. When they do that, the road is gone and the stock worthless."

"That is what I heard. I have a proposition to make you. Suppose I show you how they cannot compete?"

"Suppose you show me how to walk across the Atlantic Ocean dryshod and elect an acknowledged wet, President of the United States," answered Smathers, rather scornfully.

"But I am in earnest. I have a lot of money tied up in X. V. and P. stock. Perhaps you might not think that it was much, but it is all my wife and I have in the world. I have been looking into this competition. Am I right in saying that for five hundred miles your railroad is paralleled by the new Presidential Highway?"

"Exactly. A wide, wonderful cement highway paid for by three states and running almost parallel to the X. V. and P. lines. We did fairly well till that highway was opened. The passenger buses are making eighty miles an hour on it. They are duplicating all our schedules and are charging from a third to a half less, not only for passengers, but also for perishable freight."

"And am I right in saying that the country is in places rather hilly and the lateral roads in poor condition?"

"Absolutely right!"

"How many steep grades are there in the five hundred miles?"

"At least twelve."

"Suppose these passenger buses could not make these twelve grades and were forced in every place to detour around them? How much further would their haul be?"

"I will have our Chief Engineer answer that," said President Smathers.

That official was called in and the problem given to him. He replied that the detours would add approximately two hundred miles to the trip, making seven hundred miles in all, but that some of the detours would be over dirt roads and just about impassable to heavy traffic in the winter time.

"Then, if something happened so these passenger buses could not make the grade, they would almost have to stop running; at least, they could not compete with us?" asked the President of the X. V. and P.

"That is my opinion," replied the Engineer, "but you cannot keep them from making the grade. Those cars can make anything. They have three or four speeds and they can crawl up the side of a mountain on low."

"Good. That will be all, Mr. Jenkins. Thank you."

Smathers waited till the man had shut the door and then turned to Mr. Robins, with a sad, twisted smile.

"That is your answer. If it is done, we will force the buses to return our lawful business; if it is not done, we go out of business. The Chief says they can climb up the side of a mountain."

"They failed to climb Half-Mile Hill."

"I heard about that. No one was able to understand it. It seems that finally they had to make a permanent detour. State paid half and the Ocean-to-Ocean Lines paid half. But that was a single hill and no one has ever been able to explain it. Now, if you could cut the hill into strips and spread those strips over the other hills, it might work."

"But perhaps something like that might happen on the other grades."

"If it does, your railroad stock is worth one hundred dollars a share and will bring in at least six per cent. per annum."

"If that is the case, I think that it can be done."

"I do not like to make fun of any man," cried the President of the X. V. and P., "but if you do, you will have to be an Early Robin to catch that worm. If you are so sure of being able to do it, why not start on just one of the grades?"

"That was what I was about to suggest. Suppose we take just one. We will let the Chief Engineer pick it out for us. The one that will give the bus companies the least trouble and yet, at the same time, a good deal of petty annoyance. Then, rent me a small house at the bottom of that grade. I am not going to ask for anything else, though I would appreciate about a dollar a day to pay for my food. There will be a bill for electricity, but as I do not know how much that will be, I will simply charge it to you. Give me one month and then I will come and see you again. Perhaps I will see you in less than a month."

"All right!" agreed the President. "You tell me how you are going to do it and I will rent the house for you."

"I cannot do that, Mr. Smathers. It is rather hard to explain and, after all, it may not work, but you and the Chief Engineer pick out the grade you want me to work on and let me start right away."

Smathers looked at Robins. He could not decide whether the man really had something or whether he was insane. At last he picked up the phone, held a long conference with the Chief Engineer and then turned to the little, middle-aged man in the raincoat.

"I am going to start you at Summer's Point. There is a fairly steep grade there. The Chief tells me at the foot of the grade there is a right-angled curve in the road. Cars cannot start speeding before they hit the bottom of the hill. You draw on the company for the rent and a dollar a day for food and you can charge the electric bill to us. I will give you a pass on the road. Anything else?"

"Yes, sir. Can you make that a pass for two? I would like to take my wife with me."

"Does she help you?"

"Yes, sir. She is—well, I suppose you call her my inspiration. At least, she has been responsible for some of my inventions."

"That's good. I bet you are a good husband. Come and see me whenever you want to. Good luck to you."

Mr. Robins left the office. At once the President of the X. V. and P. sent for the Chief Engineer.

"What has that crank up his sleeve, Jenkins?"

"Bless me if I know, Mr. Smathers."

"You better watch the traffic at Summer's Point grade. Send one of your young men down there. Tell him to keep away from Robins, but, at the same time, to send in a daily report in regard to the way the trucks and buses are going up the hill. I want to see that report every day. When this bird Robins delivers the goods, I will believe in a Santa Claus."

FOR a week nothing unusual happened at Summer's Point. Early Robins and his wife had rented a little shack on the right hand side of the road near the bottom of the hill. It was a rather peculiar road at that point. First came a right-angled turn, then a very steep grade and after that a slow, easy climb for nearly an eighth of a mile. Light cars could sometimes make it, but all the heavy cars had to go at once into low as soon as they came around the corner. An average of one hundred passenger buses passed there every day and three times that many freight and moving vans.

Robins and his wife moved into the little shack. No one had lived there since the cement road had been finished. The noise, day and night, was terrific. The little, middle-aged man moved in a little furniture and some crates and had the power and light company run their wires to the place and put in a meter. They lived there exactly one week with cotton in their ears. When the passenger buses started to go up the hill, the little house shook as though there was an earthquake.

Then, towards evening of a dull day, one of the Ocean-to-Ocean buses came around the corner, went into low, and stalled. By the time it could be pulled backwards into one corner of the road, over a hundred cars were waiting to pass. After that it was a merry guessing game. Some cars went up and some did not. Tourists and the average automobilist went by without any trouble. Every bus, every truck and van that carried freight stalled and remained in that condition. By ten that evening, driver after driver was going around a twenty-mile detour through a lonely country and over narrow dirt roads. The next morning several traffic men arrived to find out what was the matter. They found nothing. Every bus, every van was going up the grade without any trouble. They sent in a report that there must have been an unusual number of intoxicated drivers the night before. At any rate, the road was all right. They phoned in this report at noon and at once left. By three everything was at sixes and sevens again and traffic was hopelessly tangled. The State Highway Department sent their men. Obviously, the only thing to do was to first close the road to heavy traffic and make it go over the detour. After that, find out what was the trouble. The carrying companies protested. They claimed that the detour was already cut to pieces and would soon be impassable. They had a permit to use the concrete and they were going to do it. The State Highway Chief was really kind about it, as he replied:

"Certainly you can use it, *if you can*. Just as soon as you have good machinery in your buses and competent drivers so they know how to send your cars up this grade without stalling and blocking the traffic, why then we will let you use it."

The Chief Engineer of the Ocean-to-Ocean swore that their cars were the best that money could buy and, as for drivers, why, he himself would take a car up there and show the Highway Department where they could get off at. He did. He took a car, had it put in perfect condition and then, with a load of fifty interested spectators, he went up the grade with no more trouble than if he were brushing a fly off his face. He sent that car on, walked to the bottom of the hill, and took another car up. That afternoon he took all the Ocean-to-Ocean cars up, either as the driver or as an observer next to the driver. As a result of this demonstration, the detour sign for heavy cars was taken down. Happy, he left for the home office. When he reached there, the President of the company glumly handed him some telegrams. Traffic was stalled again so far as their cars were concerned.

The Ocean-to-Ocean experts did everything they knew and at the end had to acknowledge that they were beaten. The only resource left was to fix up the twenty-mile detour as best they could and pray that the winter would be a cold one with hard, frozen roads. That twenty miles gave a lot of trouble. It was soon cut to pieces, buses were continually going off into the ditches, springs were being broken and there was no certainty of just how many hours a passenger would be on that piece of road. The Ocean-to-Ocean tried to consider the bridging of that stretch of road with airplane service, but were refused permission by the Interstate Commerce Commission.

At the end of exactly one month, Early Robins called again on the President of the X. V. and P. Railroad System. This time Smathers received the little, middle-aged man with open arms. He phoned at once for the Chief Engineer. When that official came, he turned to the visitor and demanded:

"Now, Jenkins and I are not going to let you out of this room alive unless you tell us what you did."

Robins shook his head:

"That is not the point, Mr. Smathers. What I want to ask you is just one thing. Did the passenger buses and freight vans stop going over the grade at Summer's Point?"

"They certainly did. In fact, they gave so much trouble that all cars of a certain weight and over have to detour whether they think they can make the grade or not. To all intents and purposes that piece of road is closed to our competitors."

"Then suppose we take another grade?"

"And you mean to say that you are not going to let us in on the secret?"

"I think it is best not to. So long as you do not know, you cannot be held accountable for anything that happens. I feel that in a few months the Ocean-to-Ocean will either voluntarily leave the X. V. and P. territory or will be willing to come to some kind of terms which will make the competition more fair. Till something happens, I want to go by myself in this matter."

They decided on another grade and Early Robins left as quietly as he had come. Within a month the same chain of events had happened at Hamilton Mountain that had taken place at Summer's Point. Only this time the detour was a thirty-mile one and the road worse, if that was possible. In spite of attempts at secrecy, the news of these two hills aroused the attention of the mechanical experts of the nation. Those who attacked the problem were impressed by the fact that the conditions were the same as they had been at Sclocum in the early part of the previous year. What no one could understand was whether the phenomenon was a natural one or was due in any way to man's intervention.

The Chief Engineer of the Ocean-to-Ocean secretly tried the Summer's Point hill with a large bus and found, to his astonishment, that there was no trouble at all in going up it. He received permission from the State Highway to use that piece of road as the shortest. After thirty hours of uninterrupted travel it once again became impossible to go to the top of it and the old detour had to be resumed. In another month the Devil's Hill at the western section of the state became impossible. Then a hill in a neighboring state, by the picturesque name of All-Days Climb, began to give trouble. At last it was impossible to tell just how a bus would have to be routed before it went out of the danger zone. All this naturally had a marked effect on the traveling public. They could not fail to note that the service on the X. V. and P. was the same, day after day, whereas, traveling by bus was decidedly uncertain.

Something had to be done. The railroads, at least as far as that five hundred miles of competing line was concerned, were daily gaining ground. They were gaining in mileage, both in regard to passengers and to freight. The X. V. and P. stock was beginning to show a profit. It was time for some kind of a compromise. With this fact in mind, the President of the Ocean-to-Ocean called on the President of the X. V. and P. Railroad.

"I am very sorry," said Smathers. "I am really very sorry, but I do not see how I can help you in any way. Our problem is with steam. I do not know a thing about the intricacies of a gasoline engine, Mr. Gunther."

Gunther shook his head in a worried, almost angry manner.

"You don't get me, Smathers. Our line has been completely disorganized during the last half year. We run from New York to San Francisco like clockwork, except where we parallel your line and then we are just in hot water all the time."

"It's a hilly country along our line," agreed Smathers.

"There is something more than the hills. Why, man, our buses go right over the Rocky Mountains like a breeze. It is something else, and your road is the one benefiting by it. What have you up your sleeve?"

"A shirt. Let's get down to brass tacks. You send your buses over the Presidential Highway. That runs right along our line. You cut our business to pieces. Now you can use the Lincoln Highway just as well in your Transcontinental route, and if you do, you will never be within three hundred miles of the X. V. and P. lines. I tell you what I will do. You promise me to stop hauling passengers and freight in competition with us, and I will promise you that the rest of your line to San Francisco will keep on running smoothly. If you are not willing to do this, I am afraid that your cars may have the same trouble in other states, too."

"You are just trying to hold us up."

"Maybe so. But it might be well for you to think about it before you start fighting us. You know, as well as I do, that you were trying to kill our line. Now we do not want to put you out of business, but we can make things rather unpleasant in the future, as we have in the past."

"Then you acknowledge that you had a hand in making us use those detours?"

"I am not acknowledging anything. I am just telling you that we are willing to enter into a little agreement with you and your subsidiary companies."

President Gunther departed and consulted a lawyer. The first thing that gentleman did was to ask for the evidence. The next thing that happened was that Gunther left the office. He wrote to President Smathers of the railroad and told him to go where it was warmer.

TEN days later the passenger buses of all companies began to stall on the other side of Denver. Several companies were affected, but the Ocean-to-Ocean was hit harder than any of the others. The cars simply started to go up the hill, stopped and had to have the air brakes put on to keep them from rolling backward. Gunther heard the news by telegraph, and went at once to see Smathers.

"There is a hill raising Hell other side of Denver," he said.

"Now isn't that a shame," said Smathers smiling.

"All right. I am ready to stop. Bring me your agreement and I will sign on the dotted line."

"And you will leave the X. V. and P. territory?"

"I sure will, and all the other transportation companies will leave with me. I do not know what you did, but we have had enough. What did you do, Smathers?"

"I really don't know."

"That's a lie!"

"No. It's the truth, but I do not blame you for thinking that I am lying. However, we won't quarrel about that point. You go and reroute your traffic and I will start in and try to get back the lost business. I guess we will get it all right, with your automobiles out of the way."

"Well, you are welcome to it. I am just glad that you did not try to force us out of business all the way across to the Pacific."

"I should worry about all those other railroads!" said Smathers, laughing. "All I am interested in is to see that the X. V. and P. has a fair deal."

A week later a little middle-aged man in a raincoat came rather timidly to President Smathers's office.

"If you do not mind," he said, "the wife and I are going to go back home. It has been a nice vacation and I did what I started out to do, but we are yearning to get back to the old house where it is so nice and quiet. We live in one of the nicest, quietest towns that there is in the State. Right on the concrete, but the big cars detour."

"Just where do you live, Mr. Robins?"

"In Sclocum."

"Isn't that the town where they had so much trouble with a hill?"

"Yes; the town is built around Half-Mile Hill. It used to be real noisy there, but they are detouring now. Had trouble in going up the hill."

"So, that is where you live? And I suppose you live near the foot of the hill?"

"Yes, right near the foot."

"Now, see here, Mr. Robins. It is illegal to kill, but unless you tell me what you did and how, I am going to die of worry. You were back of the trouble at Sclocum, and you played hob with the Ocean-to-Ocean line and made them leave our territory. You have been worth over twenty millions to our company and so far you have just cost us a little over five thousand. You tell me what you did or one of us is going out of here on a shutter."

"It was not very much, Mr. Smathers," replied Robins, almost in a whisper. "The wife is waiting for me, and we are very anxious to be back home. Suppose you bring your Chief Engineer with you some time and visit us. I can explain it a great deal better there than I can here. You will understand things better if you see the wife and me in our own home."

"You can look for us next Sunday," said the President grimly, "and I give you fair warning that we are going to stay there till we find out what you did. How much do I owe you for your time?"

"Whatever you think it is worth. My time is not worth much anyway."

"What do you do for a living, Mr. Robins?"

"I raise a little garden truck, and now and then I invent something. I manage to make enough to live on, and will do pretty well now that my stock in X. V. and P. is worth something. Well, goodbye. Have to move on. The wife is waiting for me."

The next Sunday, true to their promise, Smathers and his Chief Engineer drove to Sclocum. They approached the town from the lower end at the bottom of Half-Mile Hill. Suddenly, just as they started up the hill, their engine stalled.

Smathers got out.

"Push it over to one side, Jenkins," he said laughing. "That means that we are near the home of Early Robins. Perhaps that is his house over there. Looks a little like a bird's nest."

He was absolutely right in his conclusion. Robins lived there and was waiting for them. So was Mrs. Robins, a little middle-aged woman, who was almost smaller and more middle-aged than her husband, if that were possible.

In no time at all they were in comfortable rocking chairs, on a rose-covered gallery, in front of the house. Mrs. Robins served fruit cake and dandelion wine. At last Smathers set his plate carefully on the railing.

"Now, Mr. Robins," he said. "Remember your promise."

"It is not very much to tell, gentlemen, and under ordinary circumstances I would be afraid that you might not believe parts of it, but the proof of the pudding—you know the rest—and I certainly have given you ample proof that I can deliver the goods.

"Wife and I moved here when we were first married. We liked the place. The quiet of it just suited us, and then it was so clean. No dust or dirt. Horses just went by on a slow walk, and there were no cars. At night time, if a wild goose flew over and dropped a feather, we could hear it land on our grass; it was that quiet here. Then the cars started and finally they went past here by the thousands every day, and the wife grieved over it. She felt that our home was just ruined, as far as comfort and happiness were concerned.

"It made me mad to see how she felt, and I decided that I would do something to stop it. I found out that all the cars that were bothering us made a big noise, changing from high to low speed at the foot of the hill. To make a short story, I did a little work and made a sensitive plate that reacted to this noise. Get that idea? A car would shift gears and start grinding in low and the noise would hit this plate, and on would flash a signal lamp. No, that was not original. They are making use of the same device in their aviation landing fields. Then the next thing I invented was a ray. Lots of rays, you know, but perhaps this will be called in the future the Robin Ray. It was not very long, just about one hundred feet, but I widened it out till it was about twenty feet wide and ten feet high. Now, I connected that ray up with my receiving apparatus. Here is the sequence, a car starts to grind in low, my receiving plate detects it, turns on the ray and this ray goes right across the road. The automobile engine enters the limits of the ray which, in action, is projected across the road. The second the engine goes into the ray, the car is stalled. Now, if it stalled on the level, it would coast out of the ray and the car would start again; but here it is going up a very steep hill. It stalls and stays dead inside the limits of the ray. The only way it can go is to coast backward to the bottom of the hill."

"But what is this ray?" earnestly asked Jenkins.

"That is my secret!" answered Robins in a very dignified manner. "At any rate, I put an end to the noise and the traffic. We did not care if cars went up the hill, so long as they did it in a quiet way. The State built a permanent detour around the town.

"Under ordinary circumstances that would have been the end of it, but all our savings of a lifetime were invested in X. V. and P. stock. Naturally, we were worried when it became nearly worthless. I fretted over it, but Mrs. Robins she just naturally grieved herself sick. Somehow, I cannot bear to see her that way, so I said to her, 'Anna Lee, don't you worry so, because your husband will fix it for you,' and then I came to see you, Mr. Smathers, because I figured, that if an invention could stop the cars on Half-Mile Hill, it could stop them on any other hill. All I needed was a little house near the foot of the hill and an electric current to run my apparatus. Of course, it worked at the other hills. What bothered them was that I could switch it on and off so easy and take it from one hill to another in a few small crates. I keep it set up in the front room, and once in a while someone forgets and makes too much noise and then he has to stop and go around."

"Mrs. Robins!" exclaimed President Smathers. "You have a very wonderful man. I think he would try to lick his weight in wild cats if he thought it would make you happy."

"He certainly is a fighting husband," replied the little woman.

"Just one question," asked Jenkins. "What kind of car do you drive, Mr. Robins?"

"We never did own a car," answered Mrs. Robins for her husband. "Somehow, we never did fancy driving around in one. But we have the finest team of horses that you ever saw and it certainly is a pleasure to drive them over this concrete road. It is a real satisfaction, now that the cars don't bother us any more. Of course, Early, he walks a good deal."

"I thought so," laughed the Chief Engineer. "He looks a little like a pedestrian."

THE END.

In the Fall Edition

AMAZING STORIES QUARTERLY

"Seeds of Life"

by

John Taine

IF, according to certain theories of evolution, we have changed in our physical make-up to meet our needs during varying conditions, what are we likely to look like and be like thousands of years hence? Or, here's another idea: Will we always be able to rise above a dangerous condition fast enough to forever remain the ruling intelligences of our world? The author of this story, a writer new to our readers, not only has some novel and ingenious thoughts on these subjects, but he fortunately has a true knack of writing. "The Menace of the Little" is a "different" bit of scientific fiction that will hold you to the end and will keep you thinking long after you have finished reading it.

The Menace of the Little

By
Roscoe B. Fleming

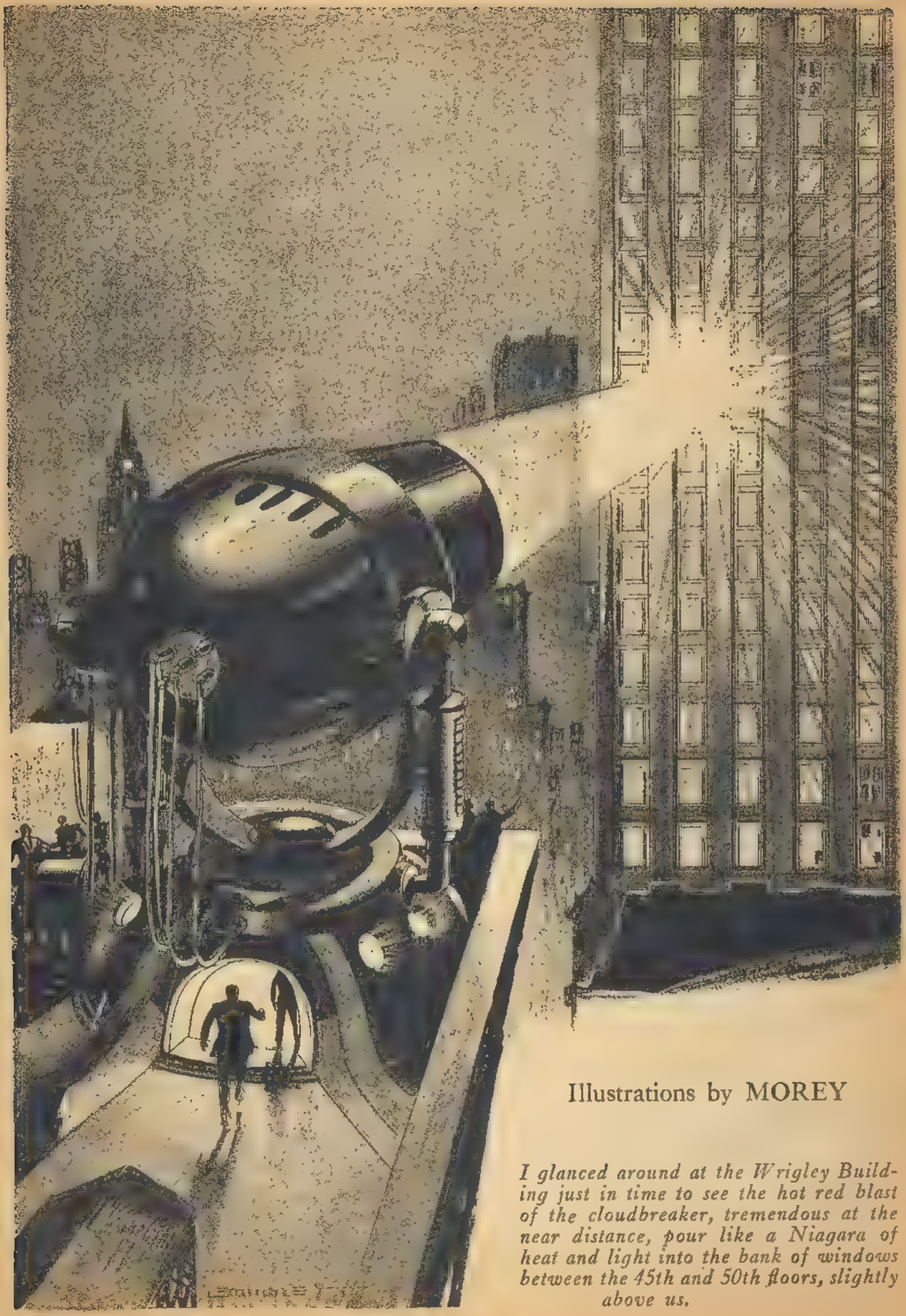
CHAPTER I

The First Murders

I HAVE no illusions as to why I was chosen by the Ford Foundation of Popular History to write this popular account of the greatest menace which ever threatened the peoples of the earth. It is not that I am an historian or a writer, but that I happened, through sheer chance, to observe at first-hand more of the momentous happenings of the year 2029 than any other one person, except the man to whom the world owes its present respite in the supreme war of history—the struggle by mankind to retain control, if not possession, of its own planet. It may be that we have witnessed only the opening skirmish. If the man of whom I speak had not preserved, in its most splendid manifestation, the inquiring mind of the true scientist, unterrified by the fantastic, and unafraid even of ridicule, our race might have staggered on to death or slavery, like a huge beast blinded and tormented by midges.

Our scientists, led by the man of whom I speak, Dr. Henry Aurelius, have wrested from our late antagonists some of their secrets, thus advancing human science perhaps a thousand years at a single bound, so that we shall not be wholly unprepared, if we are again attacked. But other secrets of the new science, to which we have received so horrible and bloody an introduction, probably will remain hidden until we have developed better brains. They involve integrations and calculations, so Dr. Aurelius and others have told me, to which the whole body of our present mathematics and science is simply not equal. We were on the verge of discovering others for ourselves, and at the sight of the necessary apparatus, or even the hint conveyed by their operations, the solutions fell into the brains of our eager young workers—Mathewson, Crane, Kuhn, Yamaki—as the apple fell upon the head of Newton. It is possible that the enemy, however, thought it necessary to use, for the subjugation of such animals as us, only simple and elementary weapons, and that he has kept unsuspected and terrible reserves.

This may seem unduly dark, and remembering the massacre in Chicago and the near-paralysis of the western world, I sincerely hope that it is. Our world has been changed and shaken terribly. I have lately read in the history of the World War—the history which first brought home to mankind the great lesson that we are all riding together on a tiny tipping planet, and in the



Illustrations by MOREY

I glanced around at the Wrigley Building just in time to see the hot red blast of the cloudbreaker, tremendous at the near distance, pour like a Niagara of heat and light into the bank of windows between the 45th and 50th floors, slightly above us.

feeling of homesickness, as it were, with which the people of the war-torn world of 1919 looked back to the bright, safe, comfortable days of 1913, I find a likeness to the feeling with which people nowadays, myself among them, look back to the days before the Invasion.

War sprang originally from the desire of cold and hungry peoples for a larger place in the sun. I am afraid that this new warfare, inspired by the need and desire of beings so unlike us that we can feel for them nothing but fear and repulsion, yet starving for the soft green richness of our earth, may be more bitter and more protracted, and possibly more disastrous, than we now dare to believe. But an aroused planet, which is pouring billions upon billions of dollars yearly into preparation under the leadership of our scientists, surely has some chance, at least, of successful defense.

To begin. I remember sitting in the news-room of the *United News* in Washington, late one afternoon in January, 2029, as "Polly," the radi-news printer, squawked and spelled out the information that C. Lindbergh Cline, grandson of the famous first president of United Communications, Inc., and genius of the transportation world, was stricken dead with heart disease at his Montauk house, after flying from New York.

"A servant stumbled on the body scarcely five minutes after Mr. Cline entered his home," the bulletin read. "His physicians state they are at a loss to understand the cause of his death, as he had always been thought to be in splendid health."

Then the printer, with its premonitory "Gu-urk" before each item and a flash of static here and there, told of a strike in the United Communications freight depot at Shanghai, and added the eighth inning of the deciding game of the Solar System series at Sidney between the Sidney Anzacs and the Los Angeles Angels, who had whipped the Philadelphia Athletics under Connie Mack, the Fourth, in our regular fall world's series. The sports editor of the *News* tore this off with a whoop and disappeared in the direction of the news-rooms, on the thirty-fifth floor.

Such items followed for another hour, then a crackle which told of a gathering thunderstorm in the Hudson Valley, the "Gu-urk" which always had for me an uncanny effect as if the almost-human creature were clearing its throat, and:

"Add Cline, New York—Dr. C. C. Mills, coming from the Cline home late this evening, said he was baffled by the death of the famous transportation executive.

" 'Such preliminary examination as I have been able to make,' said Dr. Mills, 'indicates that Mr. Cline's heart literally exploded. His entire chest on the left side is contused and swollen, with certain other symptoms unfamiliar to me.' "

I was on the late trick next day and did not reach the office until nearly 2 p. m. On the way down I bought a paper with flaring headlines: "Cline Death Like Electrocution."

There followed a further puzzled interview with Dr. Mills. Post-mortem examination had established that Cline had died instantly from a rupture of the heart, impossible from any natural known cause, and similar to that caused by electrocution, he said. Dr. Mills was careful to say he could see no possibility of foul play, but accidental electrocution nowadays is, of course, next to impossible, with electric installations of the modern safety type approved by the Bureau of Standards. "And Cline was far from any outlet when he fell," Dr. Mills added.

Late that night "Polly" uttered its familiar squawk, after being silent for ten minutes, and uttered the following, transcribed automatically upon the sheets which issued from "Polly's" stomach.

"Chicago—Lindley Hadley, famous radio inventor and expert, was found dead in bed tonight shortly after he retired. His wife said she heard him utter a stifled sound and ran to him, only to find him already dead. Hadley was sixty-two. He had been working for a year upon the problem of power-transmission by radio, seeking to make it practicable for every-day use, instead of keeping it as a standby only."

The death of Hadley was followed within twenty-four hours by that of General L. C. Ames, Commander-in-Chief of our section of the World Patrol, and considered a genius in the now-dying military science. General Ames had returned home to Chevy Chase after an aerial review at Lindbergh Field, New York, and had fallen dead as he stepped in the dark from his helicoptric fighter upon his own flat roof.

"Heart Explosions Killed Both Hadley and Ames," the headlines screamed. I believe that was the first notice the world really had that something mysterious, systematic and horrible was occurring.

CHAPTER II

Omens

ON June 15, 2020, Dariel Hobbs, Professor of Social Science at Indiana University, was taking a Sunday afternoon walk on the uplands of Monroe County, when he heard a slight buzzing or humming sound in the air above him. He glanced up, and saw what seemed like a huge ball floating slowly along some fifty or sixty feet above the ground. It passed above a grove of trees and seemed to descend into the next meadow. It rested, as it seemed, lightly upon the grass, as Prof. Hobbs, who had become interested and started to follow, hurried up, out of breath, to describe it. He had thought at first, so he stated, that it was a swarm of bees or some similar affair.

Now he saw that the ball was perhaps fifteen feet in diameter, and, too interested to be astonished, he perceived that it seemed to be of some crystalline, white, shining metal, studded at regular intervals in two wide belts around its equator, with circular projections like the bulls-eye lenses of a flashlight. He noticed a distinct chill in the air, which was a relief, for the day was hot.

The humming sound had ceased, and he noticed that the ball seemed to rest lightly upon the thick timothy grass, bending it scarcely at all. He prodded the ball with his cane, half-expecting to see it vanish with a pop. But it felt solid, and gave out a metallic sound. Still too interested to be alarmed, Prof. Hobbs put out a finger and touched it. His finger stung with cold, and he quickly withdrew it. He perceived a slight depression where he had touched the ball, and the truth flashed upon him. The visitor was covered with a thick coating of hoar-frost, although it was a hot June day and the sun was blazing down fiercely.

A thrill of fear and wonder passed over him. Suddenly, as he says, he had the sensation of being observed, and glanced around quickly, hoping for another witness to the phenomenon. When he looked again, the thing was gone. He saw the grasses waving wildly, and then it seemed as if a hand thrust him forward on his face. "Probably," Prof. Hobbs deduced, "the partial vacuum created by the sudden departure of the sphere pulled me, rather the air pushed me, forward."

ON February 17, 2023, skaters on Saranac Lake, New York, as they were tugged by their power-belts across the ice with power supplied from the toy beam-casting station set up for that purpose on the bank, were surprised to see what looked like a gigantic

gray dragon-fly, with wings three feet or more in spread, hovering and darting above them. They thought at once it was a model plane being directed in beam-casting experiments, and as they one by one cast off the power and stood gazing upward, a tiny musical drone came from the body of the apparition. It turned and wheeled and darted as gracefully as a swallow. Two shining spots at the front of the body seemed to serve the purpose of eyes. The thing poised in the air and came down slowly toward them, approaching so close that one or two leaped up and tried to touch it, laughing as they fell back on the ice. It retreated backward until it hung motionless eight or ten feet above them.

"Well, the fellow who invented that thing has a fortune—a truly reversible plane," said one of the skaters. Another, a New York business man, announced his intention of seeking out the inventor to purchase a share of the invention. Then they gradually lost interest and resumed their skating, touching the studs of their power-belts through which they tapped the beam and were driven at high sped across the lake backward or forward, as they threw the attractive or repulsive switch. The flyer followed some of them as if interested in the process. So strong a sense of being observed came over the skaters that most of them uneasily ceased their skating. It was uncanny. The thing's body was only about eighteen inches long by ten inches high and wide; clearly nothing human could be in it, yet the thing acted intelligently and, as it were, humanly.

"Tell Colman to call off his pet," said someone with an uneasy laugh. (Colman was then conducting at Detroit his well-known experiments with hovering planes controlled by radi-phone.)

At last the thing left the lake, flying in a westerly direction. The half-dozen persons who signed the report, confess to feeling much relieved.

As in the case of Prof. Hobbs, publication of this report brought a dozen or more letters, which recounted momentary glimpses of similar flyers, generally passing slowly twenty feet or more above the observers. Although these glimpses are recorded as of several years, they were all had in the winter months, the earliest being of January, 2017.

Some of the other reports probably are connected with our subject. For instance, that of the aurora-borealis-like display around the head of Mt. Seldon, Wymont, in the winters of '22, '23, '24, '25, '26 and '27 almost certainly is; the regular, and, as it were, rhythmic outbursts of static which almost ruined audi-viser reception for short periods of time during these winters almost certainly were connected with it, and the glimpses reported by Cape Cod fishing boats of "electric fish" five or six feet long, passing slowly just under the surface and blazing with rows of what seemed like electric light, may be. But I pass over these to come to the mysterious occurrences in '27 at the Boulder Dam power-plant on the Colorado River, which "made" the front pages of the nation by paralyzing Los Angeles for four days, nearly causing a water-famine in that great Western city, and the lynching of the mayor.

Henry Heron, chief in charge of the huge plant, has told in *The New York Times* of the strange feeling of uneasiness which possessed him and his men in the cathedral-like dynamo room of the plant—the feeling of surveillance, which feeling led him at last to order a search. He had not confided his own feelings to any of his men. But they received the order as if they expected it, and started the search with alacrity. He quickly learned that they all shared the same feeling, apparently caused by tiny untoward noises which penetrated the smooth dynamo hum and came to their trained ears; of glimpses from the corners of eyes of tiny scuttling dark shapes which moved with incredible swiftness from shadow to shadow, so that quickly as you might look, there was nothing there. But the search revealed nothing, and there was no place for any thing or any creature of appreciable size to be hidden in the huge bare orderliness of the place.

Heron has told how three nights later there came the angry buzz of the radi-phone on his desk and the sharp voice of his superior at Los Angeles asking why it had been necessary to relay through San Francisco to rouse him, only to tell him the power had died there, and that the pumping-stations lifting Los Angeles' water over the mountains had ceased operating. Heron glanced up unbelievingly. The dynamos were humming and the glow of lights on the instrument board showed normally.

"Everything looks O. K. here, but I'll throw on the radi-standby in a jiff," he said.

So much power was lost in beam-casting, that it was kept for emergencies only. He pressed the warning button which flashed the radi-signal to the pumping stations, and threw the switches.

In two minutes came the angry Los Angeles voice again.

"Hurry up with that radi-cast! The mayor has just called me, and talks like he wants to hang me in the City Hall."

Heron glanced unbelievingly at his instruments. "I did, sir, two minutes ago," he said, with something akin to panic in his voice.

I need not detail the frantic days which followed. Test followed test, but Los Angeles lay cold and lifeless, not a wheel turning, not a car running, not a light glowing, not a stove operating. People ate canned or synthetic food and went to bed by candle-light. The small steam standby plant, insufficient to furnish one-tenth of the needs of the city, functioned for a few hours and broke down. The dry season had run the reservoir down to the danger-point. The plant for distilling sea-water turned out water, but so brackish that people gagged on it, then this plant ceased with the steam plant. You must understand that neither water nor electric supply had failed in fifty years, so that Los Angeles had depended more and more upon unfailing systems. With strictest rationing, the small reserve might last a week before actual thirst began. Clouds of refugee planes, loaded with thousands of persons, fled to San Diego and San Francisco and relieved the situation somewhat.

Meanwhile the delicate instruments rushed to the scene by the Bureau of Standards showed only that an unparalleled condition of electrical stress centered somewhere in the mountains between Boulder Dam and Los Angeles. It was evident that a sort of screen or barrier to electrical transmission, of a sort not understood at all by the engineers, had been erected. Tests had shown that transmission was possible from the dam both north and east, and an attempt was made to re-transmit by way of Denver, but the adverse condition again prevailed between that city and Los Angeles, seeming to lie like a crescent almost around the city. The *New York American* screamed: "Electrical Pirates Suspected" in huge headlines.

Heron, haggard from ninety-six hours without sleep, hung over his board at Boulder Dam. Everything seemed normal, and the hum of the dynamos had not ceased for a second, but the strained voice from Denver told him at ten-minute intervals that no relief had yet occurred in Los Angeles. It told also of growing panic among the inhabitants of the huge coast city, unprepared to face such an emergency, after two generations of easy living. So when at one minute past midnight, exactly ninety-six hours after the breakdown, the ex-

cited voice in Denver screamed that power was beginning to flow again, Heron flung out his arms and dropped over his desk with a sob of pure relief. Within half an hour the water was again pouring into Los Angeles' chlorinating and aerating tanks. The most searching investigation by the City, the State and the Federal Government failed to reveal anything except that a shield or screen had suddenly interfered and as suddenly disappeared. "No agency now known to mankind could have produced this effect," said the Federal report.

I am happy to record that the mob which tried to lynch Mayor Budenz, of Los Angeles, was unsuccessful. His Honor retreated to the rear tier of cells in the City Jail, and threw the switch which clamped down the electric overnight guard around it. The jail had its own separate power-plant in anticipation of just such an emergency. Two hoodlums were caught in the current and the rest dispersed. But Mayor Budenz was badly beaten at the next election. People remembered in the polling booth their four-days' fright and distress.

CHAPTER III

"If a Night Goes by Without a Death——"

IT was 7 A. M. of Sunday, January 25, 2029, when I was roused by the ringing of the radi-phone near my bed. I had worked virtually all night upon the mysterious death, near midnight of the preceding Friday, of Winton C. Ames, Secretary of State, and had tumbled into bed at 5 A. M. Ames' death was the eighth of a series of which that of Cline was the first. All the victims were American leaders. All deaths had occurred roughly at twenty-four-hour intervals, except for Thursday night, when nothing happened.

I grabbed at the phone, resigned to another hard twenty-four hours, if necessary. But it was not my chief's voice. I was truly startled when the gruff tones of Dr. Henry C. Aurelius came to me. He was head of the U. S. Bio-physical Laboratory, and among our three or four greatest scientists.

"Young man, how is your credulity?" he asked with a note of grim amusement in his voice.

I made some surprised and foolish reply.

"Well, if you want a start on what may be the biggest thing that has ever happened in our world, and if you are willing to give me some advice, come on down."

I hung up, then pinched myself. I had met Aurelius' daughter a year before and had fallen head over heels in love with her. I had asked permission to call at her home, but the heavy-browed giant of fifty-six had looked at me, snorted, upon being told my profession, and had for six months ignored me. Mary Aurelius told me he had given the results of his first great experiments, twenty years before, to a cub reporter, and had since shunned the sight of a newspaper man.

I had read bio-physics fiercely, and in the last three months had succeeded in getting him to describe one or two of the things upon which he was then working, but I had never dared to ask him to allow me to write of them.

With the foolish and personal optimism of the young lover, I had persuaded myself, by the time I rang his doorbell, that he was looking with more favor upon the greatest thing in the world to me—my attentions to his daughter.

He punctured me with a snort.

"Suppose you're all puffed up like a balloon because I called you? You're no better than your clacking brethren, but I had to take a chance."

He smiled grimly as he noted my discomfort. He hustled me to his study in the back of the house, which led directly into his private laboratories. Fixing me with his fierce, icy-blue eyes, which seemed to shoot cold flames from beneath his bushy brows, he leaned forward.

"Suppose I should tell you that I can explain the deaths, not only of Winton Ames, but of Cline and Hadley and President North of the Steel Corporation and President Graves of Columbia and Millen of National Railroads, and——"

He held up a warning finger as I started to interrupt, all my news senses aroused.

"Suppose I should tell you further that these deaths may be the result or the beginning of an organized campaign, not only against our government, but against human control of the whole world, and that possibly by organisms from outside our own earth?"

I opened my mouth, more in amazement than to reply, but again that forefinger shot out.

"Suppose I should add that the organism or being responsible may exceed man in mentality and scientific knowledge almost as we exceed the beasts? Now tell me!"

I thought hard and painfully a minute, then, looking him in the eye, said honestly:

"If I went back to the managing editor of my bureau with any such tale as that he would fire me. And if I succeeded in convincing him that you had really told me such a story, you'd be certified to St. Elizabeth's Asylum within a week."

I spoke the words from a heavy and whirling heart. What was my surprise to see his face break into a warmer smile than I could have believed him capable of.

"Good boy!" he exclaimed. "I have omitted telling you one more thing. Had it not been for great good luck, I would have died Thursday night as did the rest. Our friends exercise some judgment in selecting their victims. I wanted advice as to whether I should tell my story in advance of definite proofs, and turned to you. Now, no more until after breakfast. Mary should be up by now."

He rose buoyantly and invited me into the dining-room, observing as he did so:

"Please reserve your doubts as to my sanity until later, and act as naturally as you can in front of Mary."

It was hard advice. My brain was in such a whirl that even the lovely flush with which Mary greeted the sight of me could not cheer me, and I must have seemed stupid, indeed, as I stammered some response to her warm greeting. Her mother was dead, and Mary ran the household.

"Mr. Born has kindly consented to help me in an especially important piece of research," said Dr. Aurelius.

"Oh, Dad! You're not joking?" cried Mary.

"No, indeed, I am not. And I am glad of his help."

I am afraid breakfast was a total loss for me, except for the thought that flashed through my mind that he must look upon me kindly.

Dr. Aurelius was the perfect host during breakfast. But his manner changed abruptly as he swallowed his last drop of coffee and stood up.

"And now to business. You are familiar with my laboratory, I believe?"

Mary had taken me into it some weeks before, and I had not thought, from his tremendous frown, that he was pleased when he found me there. It was truly a fascinating place. Mary had informed me that his present effort was to create as exactly as possible the conditions under which he believed life might have originated on the earth. Under a huge arched sheet of quartz, which transmitted the full rays of the sun, lay a sandy beach lapped by brackish waters, and over all blazed a dozen huge arcs, reproductions of the sun

and adding their fiery strength to his. The temperature was 120° Fahrenheit, and I had felt faint after a few minutes' exposure. Mary told me that her father was comparatively inured and spent an hour at a time there. His skin had become as tanned as that of any tropical explorer.

EVEN the insufferable discomfort of the place could not prevent me from being absorbed in what he had to say. I trotted up and down at his side, perspiring and feeling all exposed portions of my skin beginning to sunburn, while he strode absorbed in his own thoughts, jerking out short sentences past the clenched butt of a dry cigar.

"I came here to work shortly before midnight, Thursday. Out of the corner of my eye I saw something small and dark dart at me—from there," and he pointed to a corner.

"It seemed to approach more and more slowly, and I could not clearly distinguish it even in the full light. Rather, my mind refused to believe the message of my eyes. But it seemed possessed of a sort of single-minded intent to reach me, and I climbed upon a chair. Then I saw that, although seven or eight inches long, it seemed to resemble in other essentials our ordinary black ant."

He broke off and glanced sharply at me, but my face registered nothing but interest and discomfort.

"Still twenty feet or more away, its efforts became feebler and feebler, and after a minute it was still. As I descended—behind the chair—the thing sprang at me with an amazing resumption of energy. But it collapsed again before it could reach nearer than fifteen or sixteen feet. After waiting a few minutes, I went closer to it and perceived, still clenched firmly in its mandibles, what looked like a short, slender, black pencil."

He glanced at me and said abruptly: "I beg pardon, I forgot you were not used to this place."

He led the way out of a side door into a small laboratory, fifty degrees cooler than the sun-room, and I sank into a chair with a sigh of relief, feeling sure that tomorrow I would have the worst case of sun-burn for years.

Dr. Aurelius had not noticed my troubles. He went directly to a refrigerator, pulled out a small jar from which came the unmistakable odor of preservative, and, withdrawing a small trailing object, said:

"And here it is."

I gasped. The resemblance to an ant was indeed amazing, even though the head was lacking—an ant seven inches long. Even my untrained eye began to pick up resemblances and points of differences, among them that the long, slender forelegs terminated in opposed claws, if anything so delicate might be described by that word. The thing was uncanny, yet ridiculous. My mind began to project headlines: "Murders Laid to Giant Ants." The professor's cold eye was upon me.

"I may add," said Dr. Aurelius, "that so far as I have looked into the matter, the resemblance to our ants, particularly to the Ponerid or primitive ants, is, although general, amazing. I am almost prepared to say, even now, that it is more than a coincidence. You are now in possession of the essential facts in my own case, except that Standards, to whom I at once sent the tube dropped by the creature, say it is a sort of a beam-caster, simple in construction, and operated by a tiny button at the base. As a joke, Phillips turned the tube on his dog and pressed the button, and the dog died instantly. He found that death was due to a rupture of the heart, similar to those of the men who were killed, and evidently caused by some dynamically powerful projection of energy. Phillips and his fellows at Standards can make nothing of it as yet, despite its seeming simplicity.

"Secondly, the brain of this creature, enclosed in a case much larger in proportion to the body than the heads of any of our terrestrial ants, has a wealth of amazing convolutions, richer even than those of the human brain. I sent it at once over to Breathitt at the Secret Service to be psycho-graphed."

This was the process by which the Secret Service claimed to be able to snatch from a dead brain, by some complex sort of photography again involving the use of electro-rays, a sort of shadowy photograph of the last impressions—or the deepest—of its owner. The process had never been legally recognized by the courts as producing evidence; indeed, it was used only as a sort of last resort for clues.

"Thirdly, the creature's skin or outer covering was apparently false, with the true chitinous skin underneath. The false skin or clothing was soft in texture, fitted closely to the body, and resembled a diver's suit. The three big protruding 'eyes' of the creature were fine lenses, of some flexible, apparently synthetic material resembling glass. The creature's real eyes are small, and I should judge, inferior for purposes of sight when not reinforced with lenses."

He paused, but I drew a long breath and remained silent. Any comment, I felt, would have been nothing but a silly expression of amazement.

Dr. Aurelius went on: "I was struck, of course, by the similarities of the deaths of Cline, Hadley, Ames and the rest, coming as they did at twenty-four-hour intervals——"

"I was working on Ames' death all night," I interrupted.

"What did you learn?" he asked eagerly.

"Nothing, I'm afraid. Ames' housekeeper heard him cry out and fall and—" a light was breaking upon me—"she spoke of seeing something dart into a dark corner of the room. She paid no attention to it, as she was intent on helping him."

"Well, the New York newspapers did not mention it, but I have established, by inquiry, that there was a similar occurrence in Millen's case—that something small and dark disappeared beyond the circle of light in his study, as his son ran to him upon hearing his cry," he said.

"Now, the attempt upon my life came twenty-four hours after Millen's death and twenty-four hours before that of Ames. Have you seen the morning papers yet?"

"No, but I worked almost all night and saw the U. N. flimsies."

"No deaths?"

"Why, yes, now that I think of it. Henry Pierce died very suddenly in San Francisco about midnight as he reached home after coming from China yesterday in the steamer *Eastern Star*. Heart disease, the bulletin said."

Dr. Aurelius' blue eyes burned. He did not seem surprised.

"Who next?" he asked, in a tone curiously gentle.

"Good Heavens, sir!" I cried. "I hope the strange beings do not come back."

"I don't think so," he responded. "One man more or less is of no consequence. But don't you see why something or somebody killed those men, aside from the moral effect? Why, they are among the hundred from whom the President would have chosen his advisers in case of a great national or international emergency. Millen—I knew him well, and there wasn't a better brain in the country."

But my own brain had absorbed about all it could hold, let alone react upon. I shook my head.

"Well, you may be interested to know that I advised Breathitt this morning to redouble the guard around the President, and to have the White House and grounds

thoroughly searched, and that he is having it done at this moment."

I sprang to my feet. "Sir, may I have that? May I use that?"

"We-ell, I see no reason why you shouldn't. It will be all over town shortly, anyway. Impossible to keep that sort of thing hidden, but the political fools always try. You may tell your editor that a double guard is being thrown around the President, and that this is the result of the series of deaths, and that the death of some American leader is expected this evening and one for each of some evenings thereafter. It is believed that if there is a break in the series, it will mean that a murder has failed in execution. But tell him nothing more. You may, if he presses you, give him, in confidence, the source of your information."

I sprang for the radi-phone, choking with excitement.

It seemed an age before I heard his cross and sleepy voice.

I babbled my news in a breathless rush.

"What's that? Say it over again—slower. Who's been feeding you hop?"

I repeated, and he seemed slowly to comprehend.

"Say, this is a bright sunny day, and I was going to fly up to Jersey to play golf, but, if there's anything in this, I won't play golf for a month," he said. "Who gave it to you?"

"In confidence, Dr. Henry Aurelius. I'm at his house now."

His voice held a note of growing excitement.

"Put him on, will you?"

Dr. Aurelius only confirmed my story and refused to add another word.

Then, as there was clearly an excited expostulation at the other end of the wire, he said, sharply:

"Breathitt will give you details. May I keep Mr. Born here?"

He hung up and turned back to me. "Let us go into the study. I have hardly given you an inkling of the really amazing side of this business. I don't dare to breathe it to anyone. I have been trying to keep calm, but that brain alone was enough to set a bio-physicist delirious. If I don't get it back or get another, I'll never forgive myself, although I know that what I did was absolutely necessary."

CHAPTER IV

"A Planet Closer to the Life-Giving Sun——"

HIS first move upon reaching the library was to take a pile of clippings from his desk and hand them to me.

"Look through these."

I leafed them over quickly. The substance of them I was already familiar with. I turned expectantly to Dr. Aurelius. His question was as amazing as any other event of that strange morning.

"What do you know about Mars?"

"A little, sir. I interviewed Dr. Howe of the National Observatory upon it a month ago. As I remember it, their latest calculations confirm Dr. Howe's own research of thirty years ago. They have established, he said, that the Martian atmosphere is as thin as that of our earth at 23,000 feet above sea-level, and that the possible margin of 70-100 degrees upon earth above the freezing-point of water, which makes our life possible, is reduced upon that planet to 20 or so at the widest, so that their climate is never warmer than our winter here. He said that if life existed there, it had undoubtedly adapted itself to these conditions through aeons of stern necessity, and that certain reactions of the Martian atmosphere as seen through the 500-inch reflector at Mt. Wilson cause him to believe that it is in part the offgiving of living organic matter—plant or animal—though this life may be entirely unlike earthly life."

I stopped, quite out of breath.

He nodded. "You have forgotten two important factors," he said. "Gravity on Mars is two-fifths that of earth, and Dr. Howe went on to add that the dominant species on that planet might more nearly resemble our insects. On earth, Man has pushed aside or disregarded the insects in his rush toward mastery, but life resembling that of certain of our insects would be more perfectly fitted for mastery on Mars than any other. You see, I read your interview, and in talking with Howe later at the Cosmos Club he complimented you highly upon its accuracy. I took occasion to pump him."

I flushed at the compliment, but he continued talking very quickly:

"Now, supposing a dweller upon a smaller and much cooler and older planet could come to this earth, what would it seem like to him? Extremely hot, would it not? With wretchedness or even death arising from the greater pull of gravity upon his organs and muscles? He would have to fight the earth's gravity even to creep. The pressure of our atmosphere would render him extremely uncomfortable, and its composition, strange to him, might even be fatal. In short, he would be nearly as wretched and helpless as you would be under water heated to 150 degrees. And while such a dweller might have become immune to disease upon his own planet, our bacteria of one kind or another should finish him off quickly. His unearthly tissues might make them sick also—but they would get him, and quickly. I remember reading a fantastic romance by a writer of the last century about a Martian invasion. He had the Martians conquering the earth, only to fall a prey to our diseases. Strange that intelligence such as he assumed theirs to be, should not have foreseen this and guarded against it."

"I think I see what you are driving at, sir," I said, "but frankly I can't quite grasp it. What you are saying seems beyond credulity."

"Suppose," he went on without heeding me, "you are a dweller upon a smaller planet. Every two years or so you swing by a planet closer to the life-giving sun, whose contours and colors and shining waters, seen through your powerful telescopes, reveal a world much warmer and newer than yours. You are fairly comfortable, but you foresee the inevitable end, perhaps millions of years in the future, when your own planet will become untenable for any organic life. The newer planet undoubtedly contains life—but a low form of life, to be destroyed or domesticated. Can't you see the idea developing—the idea of colonizing this neighbor, of bringing your race a new youth under the friendly rays of a closer sun? Why, man, millions of years from now we may be turning to Venus, just as these creatures are turning to the earth!"

"And if any such invasion of our globe has occurred"—so fully had he implanted the thought that I did not even start—"it is my opinion that it is the organized effort of a whole race which has thought hard toward it for thousands upon thousands of years. I mentioned my visitor's chitinous overcoat. When I stripped him of it, it rose at once and floated to the ceiling of the laboratory. I had to mount a ladder to bring it down. In some manner it was unaffected by gravity. He weighed without it, roughly, twice what he weighed with it. If they have discovered the secret of combating or overcoming gravity, it follows they know many other things unknown to us and——"

CHAPTER V

The Psychographs

THERE was a ring at the doorbell, and a colloquy in the hall. Dr. Aurelius glanced through the half-opened door and said:

"From Breathitt? Come on in."

A plainly dressed middle-aged man came in, carrying a flat parcel and a small bundle. He handed both to Dr. Aurelius, remarking as he did so:

"I'm glad to get shut of those devilish things. All the way over I felt as if I were being shadowed. I thought that brain was of a squirrel, but our anatomist says it's the devil's brain." He shuddered slightly.

Dr. Aurelius seized the parcels, quickly placed the round bundle in the refrigerator, and opened the flat parcel. There were two separate sets of photographs, dim, and yet stronger than any human psychography I had ever seen.

One of them showed very distinctly a two-headed mountain peak clad in snow. But it was the other which riveted our eyes, and, indeed, brought a gasp of amazement from me.

"And if that's any place, it's hell," remarked the messenger, indicating this photograph with a thumb.

Millions of persons have seen the enlargement which hangs in the National Museum, and I have often watched their awed and disturbed faces as they came away. Yet it is only the vague and half-remembered glimpse, as it were, of a landscape, strangely dark and eerie, and of a peculiar color, like no combination in our earthly spectrum—"reddish" is the nearest I can come to it. Those who have seen it will know what I mean.

Ranged about the center, thousands upon thousands, too dim for any individual to be seen clearly, are black dots, horizontally oval, in the case of those few which can be distinguished. How can I describe the certainty that stole over me, that these were sentient beings, and that their combined gaze, their combined thoughts, their combined wills, were bent with all possible power upon me? I was for the instant, you see, in the place of the subject of the psychograph. And slowly, shudderingly, against my common sense, against my will, which fought not to believe, against my life-long education in rationality, came the conviction that this was no earthly landscape, that these were no earthly habitants, but something outside and beyond the atmosphere of our familiar world. In that moment I was convinced of everything Dr. Aurelius had said.

When I recovered my dazed senses, I heard him swearing softly. The messenger from Breathitt, evidently dismissed, had beaten a relieved retreat.

"A true bi-lobular brain," said Dr. Aurelius. "One psychograph is of an earthly landmark which impressed our subject most strongly." He took a magnifier and bent over the first photograph. "Here are trees," he added, indicating a spot where, taking the magnifier, I distinctly saw the saw-toothed green shape of pine trees, running up the ridges.

"Will you take this photograph over to Willard Wilson's house and have him look at it? The head of the topographical survey, you know. He lives six blocks from here on Alaska Avenue. I want to know the location of this mountain. He has been all through the West and may recognize it at once. Impress upon him that it is exceedingly important, and that if he cannot identify it, I should like him to recommend you to a member of his staff who is likely to. And hurry!"

I tumbled through the front hall with only a glance for Mary, in spite of the reproachful look she gave me. Five minutes later I rang Willard Wilson's front door bell. Soon I confronted a grave and correctly dressed man, who, I guessed, had just returned from church. After I had explained my errand, he looked at the photograph keenly.

"It might be Mt. Wilson in Alaska, or it might be—wait a minute." He fumbled in his desk and found a magnifier. Looking through this at the photograph, he said:

"It is Mt. Seldon in Wymont National Park. That tiny speck you see in the near ridge is a ranger's cabin. You remember that when the states of Montana, Wyoming and Idaho ceded land to form the new state of Wymont, the new state in turn set aside an area of 400 square miles for a national park, which contained the Bear Mountains. It is preserved absolutely as a wilderness park and forest reserve, and is inaccessible to the public except for three summer months. Mt. Seldon is 14,000 feet high, and the saddleback you see is at 10,000 feet elevation."

Thanking him for his information, I started back. A newsboy came crying an extra down the street, and I shivered as I saw the huge black headline—"President Guarded." If they only knew against what they were guarding the President!

The story gave only the details which Dr. Aurelius had authorized the Chief to use, and which had apparently been verified by Breathitt. The thrill of participation in my first big "scoop" was still upon me as I opened the door of the Aurelius house and he greeted me eagerly. I informed him of what Wilson had said, and he quickly drew me inside the study.

"I have put in a long distance call for the Secretary of Peace, who, I am afraid, will have to metamorphose himself again into a Secretary of War," he said. Some fifty years ago the offices of Secretary of War and of the Navy were merged into a single Department of Peace, which had again resolved itself into the job of liaison between the United States and the World Patrol. "They are trying for him at New York and San Francisco. Meanwhile, dinner is ready." This old-fashioned household still enjoyed Sunday dinner at noon.

CHAPTER VI

"It Sounds So Nice to Hear You——"

THAT was for me a flurried meal. I was so inattentive to what Mary said, that she at last gave me a reproachful glance and ceased to try to talk. Dr. Aurelius ate with appetite, talking meanwhile of the merits of "Carmen" as heard and seen from Tokio over the audi-visor the previous evening. He was of the opinion that the Japanese were so far from understanding the Latin spirit as exemplified in the famous old tale of love and blood that the excellence of their stars could not entirely redeem the performance.

"Woodrow Wilson," LeMay's epic drama of the Great War President, was scheduled for the evening in Paris, and Dr. Aurelius expressed the hope that we might be able to overcome the North Atlantic stati-bank sufficiently to tune in, although his audi-visor was old-fashioned, he said, and only under exceptional circumstances could bring in Parisian performances.

I played up to him as best I could for the remainder of the meal, exchanged a joking remark or two with Mary, and rose in much quieter spirits. The radi-phone in the study rang. Dr. Aurelius hurried to answer it, and I heard him say, "Mr. Secretary?" In a few minutes he returned, and talked on cheerily—I remember his comparing the social theories of Wells, Shaw and Polakov—until he remarked that he wanted an hour in his laboratory, and withdrew.

The instant he was gone, Mary overwhelmed me with questions. I answered them noncommittally, and at

last she said, aggrieved: "Oh, well, if you don't want to tell me anything, it's all right."

"It isn't that, honey," I answered earnestly. "I know so little about it and it's so tremendous that my head is all in a whirl. And I can't imagine. . . ."

I had stopped, for she was regarding me with a teasing smile.

"It sounds so nice to hear you say that," she said.

"What?"

"What you just called me."

I suddenly remembered.

"I'm—I'm sorry. I have been calling you that in my dreams for months, so it just popped out. I—I——"

"Oh, all right, if it was a mistake."

"But it wasn't a mistake, dearest girl. I love you more than anything there is, but I'm so poor and only an unknown young newspaper man, and your father is so famous——"

I stopped again, for she was looking at me with the loveliest and tenderest look I had ever seen.

"Don't you see, silly," she interrupted, "that Father has liked you ever since he met you? If you don't, I do. He was afraid I'd go off my head about one of those rich Harvard boys in spats or about some one in the State Department. And the very first minute he had a chance to throw something your way, he did, although you won't tell me about it. If I'm going to be your wife, I'm going to help—" But I stopped her again. I finally told her, as I should have known from the beginning I would have to do, exactly what we were up against, so far as I knew it.

She listened with wide eyes, breath that came fast, and a whitening face.

"It seems too horrible to be true, that anything could so threaten our comfortable world," she said, "but maybe we have been getting too soft. Mother Nature always has something up her sleeve for those who get too soft—" Mary had been trained as a biologist. "I am glad you told me, and that we're going to fight it together."

The study door swung open and Dr. Aurelius strode out. He looked preoccupied, but as he gazed at us his eyes softened and a little smile twitched the corners of his mouth.

"Well, children?" he questioned. I noted that in my confusion I forgot to let go of Mary's hands. I tightened my grip upon them, and started to speak.

"Dr. Aurelius I—we——"

"Yes, yes, that's all right, Robert," he said, hastily. "I think I hear an airplane overhead. Keen fellow, McNab, and I put a bug in his ear, too."

We ran to the window and sure enough we saw a huge 'plane hovering down upon the skating pond in the park across the street. The skaters cleared a space for it. Two figures stepped out and the 'plane, buzzing like a huge fly, rose again. The two men came hastily to the house. Dr. Aurelius ushered them into the study, and beckoned Mary and myself in after him. "This is Mr. Born of the *United News*, and fiancé of my daughter," he said.

McNab, a tall, distinguished-looking man of middle age, scion of the famous California family of that name, barely gave us a glance. "Of course, it is understood that what is said here does not go beyond this room," he remarked. "Now to business, Dr. Aurelius, I believe you said you had something to tell me concerning these deaths, and that you were personally responsible for the guard around the President. You said, I believe, that you could not speak frankly over the 'phone, but that the present moment marks a grave crisis, both for our country and for the world." Dr. Aurelius nodded.

"I am aware," he said, "that what I am about to say will be amazing in the highest degree, and perhaps unbelievable, but I must ask you to hear me through to the end." He then plunged into a recital of the circumstances, much as he had related them to me, but the whole was closely knit together into a piece of cumulative reasoning which carried conviction with it—conviction, that is, if the tale had been less amazing. I saw our visitors—of whom the second was McNab's personal aide—exchange glances as he went on. On several points Dr. Aurelius went into more detail than he had with me.

Speaking of his visitor's outer skin or coat, for instance, he said:

"If they have succeeded in overcoming even partially the effect of gravity, and restoring to their muscles the elasticity they normally enjoy, this is the secret of their rapid movements under our conditions. Probably this explains their being here at all. Their vehicles of transport must be constructed throughout of similar material.

"In this suit also may be found the secret of our visitor's immunity to our bacteria. I can think of no other reason why they should not have fallen victims of disease. They have anticipated and guarded against it, and their food and air are rendered germ-free. Probably they have also found a way to strain and lighten for their use the mixture of our atmosphere, horribly heavy and thick to them.

"I am convinced the attempt upon my life failed only because they failed to anticipate the temperature of my laboratory. To the difficulty of operating under earthly conditions was added that of a temperature as deadly to my visitor as one close to the boiling-point would be to us. No other death attack has failed."

His calm certitude was making an impression, but our visitors still exchanged uneasy glances. It was the psychographs which carried the day. "I am inclined to think our visitors have true bi-lobular brains, one side of which has by some operation or phychological process, been reserved for impressions, memories and instruction from his former home, and the other for his earthly duties," he said.

I saw McNab draw a shaken breath as he gazed at the photograph I have already described.

"You see before you a vast mass of our visitors' fellow-beings, impressing into every fibre of his brain the will to power, to victory, to convert this warmer planet, inhabited only by beings of lower mental orders, into a colony where their race may begin a newer and richer existence," added Dr. Aurelius.

"To sum up: A race of beings probably from outside our earth—and the evidence points to Mars—a race which evidently possesses scientific knowledge far beyond our own—has been present on our planet for at least eight years, and probably longer.

"In that time they have perfected weapons for a war upon mankind, have established a base, and have obtained an amazing knowledge of our customs, our organizations, and our strong and weak points, and have begun to strike at the best of our brains. Upon thinking it over, I am inclined to believe they underestimate us. They count upon an amazed herd-stumbling and herd-terror, and a terrified capitulation after the world becomes aware of their powers, and perhaps after a mass demonstration or two."

McNab's first question showed not only that he was convinced, but the Scotch practicality of his brain.

"Where would you guess this base to be?"

"Thanks to Mr. Born's assistance, I know," said Dr. Aurelius quietly. "It is at Mt. Seldon, in Wymont, in the most inaccessible portion of Wymont National Park. There they have found conditions more nearly paralleling their own than they could have found anywhere, except upon the Antarctic Continent, the Himalayas, or the higher Andes.

At last, as the great group of breakers showing the location of Chicago came into sight ahead, Dr. Aurelius snapped shut the notebooks over which he had been poring, and announced: "Dinner in Chicago, on the Roof."

"And what would you advise?"

"I should advise that you see the President at once, and commence instant preparations for resistance, keeping them as secret as we can and communicating only by word of mouth or in writing. I think the country must be kept in absolute ignorance of the real meaning of what is happening, at least for the present. Judge by your own first reaction—what a struggle we're in for—not only against these invaders, but against world-wide ridicule! Think what Senator Leeds would say in the Senate, if he knew that the whole armed forces of our government were being prepared for war upon—ants! or ant-like beings! Why, he could carry the next election on that issue alone!"

I shuddered, for I could easily imagine the warrior from the state of West Texas in action.

It was agreed that McNab should obtain an appointment with the President early next morning for himself and Dr. Aurelius.

But it was an agreement which was never carried out. That evening, as Colonel Stanton, head of the White House Secret Service, was making his last round of the building, he heard a fall in the President's study, and rushing in found him dead in exactly the same mysterious manner. In the confusion the White House was not searched for an hour, and when the search was begun nothing was found. At midnight young Emsley Morton of New York was sworn in as President, at his suite in the New Mayflower.

CHAPTER VII

"With My Two Men——"

I WENT to the office from Dr. Aurelius' home. I had decided, on the way down, that I could not inform the chief of all the happenings of the day, and must content him with the assurance that I was on the inside of the biggest "story" in the history of the world, but could not reveal it even to him. Naturally, he did not like this and we were almost at the point of quarreling when the "Polly," stationed in his private office, began squawking excitedly.

"Gu-urk—Bulletin—Flash: "President Simms died suddenly at 10:43 tonight, apparently of an acute heart attack."

After some further details the early story concluded:

"'The similarity of the President's death to the eight sudden deaths of leading men in the last two weeks, the latest of these being that of Henry Pierce late Saturday in San Francisco, causes suspicion of foul play,' Colonel Stanton said."

The chief had watched the wriggling sheets of copy as they emerged from "Polly's" stomach, with the fascinated gaze of a man watching a snake. He looked up quietly, as the message ended, and said:

"All right, Born. Protect us in every way you can. Draw on the cashier for what you need up to $1,000. You're your own man from now on. I trust you. Send in Smith and Hardy as you go out, and tell the operator to rout out every staff member she can reach and get 'em down here."

He turned calmly to work as I left. I was dazed in the knowledge that I, the youngest man on the staff, had been turned loose with an absolutely free hand on the biggest story in history, only beginning with the assassination of a President. But as I stumbled through the hall, my weariness asserted itself. Climbing to the roof, I got into my little Helio coupé, and five minutes later was descending in Dr. Aurelius' front yard.

Mary met me in the front hall in négligée, her face pale and troubled. "He's in the study. I must get him to sleep. He hasn't slept for forty-eight hours. Rob, isn't it horrible?" I comforted her as best I could and we went to the study. Her father's face was bent over some documents on his desk with an expression of savage concentration.

"Yes, McNab just called me," he said, when I asked if he had heard the news. "I didn't expect it so soon. Go home, Robert, and get some sleep. I want you to go to Wymont with me tomorrow. McNab is having Mt. Seldon surveyed. I will see President Morton at nine o'clock and we should be off by ten."

THE alarm clock by my bed shrilled, and I awakened stupidly to gaze at a bar of sunlight on the wall, my heart full of fierce happiness as I thought of Mary. Then the full memory of the last twenty-four hours closed around my heart like bitter icy waters, and I shuddered. Five minutes later I was shaving, and when the radi-phone rang at nine o'clock, I was in a heavy flying suit, with a gun at my side. It was Mary inviting me to breakfast. I rang up the chief and told him I would be gone for the day, but would report that night.

We ate breakfast side by side, and not even the seriousness of the situation could prevent our talking and laughing happily. At a quarter-past ten, while we still sat side by side, Dr. Aurelius came in.

"Good!" he said, seeing me. "Talk on the way."

Mary kissed us quickly and disappeared. Ten minutes later, comfortable in the cabin of Dr. Aurelius' huge sedan, we rose from the ground, went up to 10,000 feet, and started north of west with every ounce of drive in the engines. An assortment of strange looking instruments filled the cabin, except for the space occupied by ourselves and McNab's secretary, who had been in the cabin when we entered. At five hundred an hour we had just passed Pittsburgh about 11 A. M. when I felt a pressure on my hand, and, looking around, saw Mary.

"I just couldn't stay home," she said, "with my two men—" and stopped.

Dr. Aurelius smiled grimly.

"You get off at Chicago, young lady, and visit your Aunt Emma," he said.

But as the 'plane neared Chicago, he glanced at his watch, and did not order a descent. McNab's secretary, Reynolds, saw Mary climb into the cabin, but she pleaded so hard he consented to keep her presence a secret. How often have I thanked Heaven her father did not force her to descend at Chicago!

As we approached Boise, in Montana, munching chocolate bars for a late luncheon, the plane descended closer to the ground, and crept at a mere 200 miles an hour up the valleys of the Coeur D'Alene. It was necessary to rise again 5,000 feet to the icy plateau where we finally descended, the wind cutting through our heavy clothing and our eyes aching from the glare of the sun on limitless expanses of snow under an intensely blue sky. It was about 5 P. M. Washington time; 2 P. M. Coast time. We had gained three hours on the sun. Far to the north was the dim mass of Mt. Seldon. We unloaded the instruments, one of which proved to be a three-inch telescope mounted on a tripod, but at the others I could only guess. They were exceedingly complex. Dr. Aurelius, aided by the pilots, who turned out to be two young men from the Bureau of Standards, spent some time making careful observations with them, and putting the readings down in notebooks with extreme care. Mary and I peered through the telescope. The icy mass of the twin peeks seemed to leap the intervening distance, and to stand up within a half mile of us, but we could see no sign of anything unusual. Dr. Aurelius did not seem surprised at this news.

At last he seemed satisfied with his own work, snapped his notebook shut, and we began the labor of re-loading. The sun was setting as we began the return. Night fell like a black curtain, as we sped away from the sun. We ran into cloudy weather over Minnesota, and the hot red beams of cloud-breakers stood up to guide me. At last, as the great group of breakers showing the location of Chicago came into sight ahead, Dr. Aurelius snapped shut the notebooks over which he had been poring, and announced:

"Dinner in Chicago, on the Roof."

We alighted on its quarter-mile wide expanse as the clocks were striking ten.

CHAPTER VIII

The Massacre

EATING a good dinner within the glass-walled station, forty stories above the street, while airplanes settled softly in their slips outside or rose loaded with passengers for New York or Dallas or San Francisco, I had to glance at the tired faces of our party to realize that the past twenty-four hours had not been a dream. Here and there someone was talking excitedly about the death of the President. But laughing men and women came in, glowing from the cold, waiting after the opera for the Indianapolis or Ann Arbor planes, the lights glowed softly, shoulders shone, and white shirt bosoms gleamed; and it all seemed safe and comfortable and normal. We were on the town edge of the Roof. On the other side, tonight, would be only the limitless gray

expanse of the restless lake, but from our windows the lights of the city gleamed as far as I could see. I saw Dr. Aurelius looking at me.

"Strange, is it not, that after the Electrical Revolution had made power and transportation available to the humblest villages, the cities should have continued to grow?" he said.

Outside, on the city side, the huge beam of a cloud-breaker went up to heaven, glowing with the heat which helped the neon rays to break through the clouds in the thickest weather and form a pattern of safety for harrassed pilots. Its near presence really made the restaurant too hot, and I perspired in my heavy flying clothes. And the reddish glow it cast pervaded everything, though not unpleasantly.

We were just on the point of leaving when there came a sudden change in the atmosphere. The radi-speaker in the center of the room, which had been pouring out the soft rich tones of the Poictesme suite of Deems Taylor, ceased. There was a stir near the entrance. Dr. Aurelius rose and hurried to the door. He stopped and spoke to the manager of the Roof, whom he knew.

"Something wrong down below," said the latter, as I came up just in time to hear. "The elevators have stopped running, and I can't get anyone on the phone. And I don't like the noises."

Dr. Aurelius and I hurried out and went to the city edge of the Roof.

The streets we had seen so bustling as we descended were absolutely deserted. Here and there a bus or an auto was careening drunkenly down the street. Several had smashed against the arcade pillars, and one lay on its side below us, blazing quietly with the blue flame of synthol. Of human beings, or of anyone living, not a trace—it seemed—but there! there! there!—what were those scattered tiny heaps lying quietly in the street, like someone's cast-off clothing? I caught my breath as their significance came to me. Death was stalking the night with his scythe of horror!

Here and there I heard a thin shriek, loud in the sudden quiet of the city. They seemed to come from about the second stories of the buildings below.

Dr. Aurelius caught me by the shoulder. "Run back and get the rest of the party into the 'plane. Tell the pilot to be ready to go in a second. We may have to leave very quickly. Then come back to me here."

Returning, I ran into him and the manager, hurrying toward the big dome-like structure from which sprang the city-wide cloudbreaker. The tumult on the roof had increased, and here and there airplanes rose with a hasty buzz.

I joined them as they entered the door, where three men were leaning perplexedly over a long, inclined desk-like affair, on which the dials of various indicators gleamed in the pervading reddish light. The place was very hot. Dr. Aurelius was talking in an undertone to the manager, who was nodding. His face pale and perturbed, the latter then ran to the bank of instruments.

One of the men turned and said:

"Can't make this out, sir. Something has played hob with the indicators. Seems to be a condition of great stress centering around the Wrigley building"—which was 400 yards away.

"Can you locate it that closely?" cried Dr. Aurelius. He seemed to be intensely excited, the first time I had ever seen him so.

"Why, yes, sir, we could locate the floor if you wanted to," said the man in a surprised tone.

"Then do it, for God's sake, and quickly."

The man stared, but, receiving an affirmative nod from the manager, he and the other two bent quickly over their instruments. For a few seconds there was silence, while Dr. Aurelius fretted. I dared not allow my imagination to play with what might be going on in the city below, with the knowledge shared only by him and myself, among those present. Mass murder? a mass demonstration, instead of on the limited but devilish and selective scale we had already experienced? I flamed with futile wrath, and then felt sick as I thought of the cunning, the vast knowledge, the absolute inhumanity of those with whom we had to deal. And I thougnt of Mary sitting in the 'plane outside, and wished profoundly to be gone before that scythe of death completed its full sweep.

The chief operator turned from the instruments, and reported:

"Main stress seems to be somewhere between the forty-fifth and fiftieth story windows, sir. Don't know if on this side or the other."

"What is the armament of the Roof?" asked Dr. Aurelius sharply.

"Only a dozen machine guns and a .75," the manager answer apologetically. "We've only had them for three years and then only as protection against a rocket raid. They got $52,000 here, and we put the gun in to get 'em after they got in the air, the next time."

Dr. Aurelius fumed for a second. "Can you turn the .75 on the Wrigley building?" he asked.

"Ye-es, we could, but I wouldn't like to take the authority——"

"Authority! Don't you realize that thousands of people have already been killed by some devilish force operating from that building, and that we've got to get that operator and get him quick? If he sweeps his ray up this far, everyone in the center of the city will have died, including you!"

The manager's face paled, and he seemed dazed. As he hesitated, Dr. Aurelius' eye caught the red haze of the cloudbreaker through a window.

"Can that cloudbreaker be swung on the Wrigley building?" he asked.

"Y-yes!"

"Tell your men to train it on the building between the forty-fifth and fiftieth floors!"

In spite of the imperious snap of the words, the manager hesitated.

"You'll—you'll be responsible?"

"Great heavens, yes!" Dr. Aurelius roared. "I'll see that you get a medal for it!"

The chief operator spun a small wheel, like the steering wheel of a 'plane, and somewhere near I could hear the smooth rumble of massive machinery. Outside, I could hear cries of astonishment and consternation. I thought of Mary, and ran out. Groups of people were standing about, gazing at the descending breaker, and chattering excitedly. I flung a word of reassurance to Mary, sitting tense in the cabin of the sedan, and ran back, stopping a second at the edge of the roof. The top floors of the big hotels were brilliantly lighted and the windows were crowded. From a window across the street came a whoop of drunken laughter. Farther down—seemingly below the tenth floors—all was quiet, though the lights still blazed. I shuddered as I caught glimpses of what seemed huddled heaps of clothing lying over window-sills below, and similar huddled heaps surrounded by red splashes at the base of the buildings far below. Down in the street a man was running—although he seemed to be barely moving at that distance—up from the south, avoiding the huddled heaps and the shattered motor cars. Still farther south there was movement and commotion, and I could see a police line drawn across the street.

I heard the clang of fire apparatus—incongruous in this steel and stone city—and the shrieking of ambulances far away. Then I heard exclamations from those

near me, and glanced around at the Wrigley building just in time to see the hot red blast of the cloudbreaker, tremendous at the near distance, pour like a Niagara of heat and light into the bank of windows between the forty-fifth and fiftieth floors, slightly above us. The huge panes of sun-glass, almost a story high, blazed starry for a second and then disappeared, leaving black gaps. I knew the inside partitions to be mostly of glass, as in all modern buildings or old ones remodeled—as was the Wrigley building—and knew that the beam would sweep like a destroying sword through the entire width of the building. It was certain that in the next minute those five floors would become almost like a furnace, and I breathed a heart-felt prayer that no human being should be working there that night, or should have seen the cloudbreaker descending in time to get to a floor out of range.

As I rejoined Dr. Aurelius, he smiled grimly.

"Well, I guess they'll find we have a few rays of our own," he said.

I suggested somewhat timidly that the operator, if destroyed, might leave the ray to run wild, but he smiled and said: "These creatures are like machines. I am certain that his last act would be to switch off the ray." And so it proved.

We walked back to the office, where Dr. Aurelius got the mayor of Chicago on the 'phone at Evanston. He told the latter official who he was, and that he had ordered the cloudbreaker swung on the building to destroy the source of the devilish ray which had slain so many persons. I could hear the mayor's excited voice on the phone. Of course he and all other city officials had been absolutely in the dark as to the source of the mysterious catastrophe.

"Look particularly in the Wrigley building for machinery of some sort, probably not of any great size, and hidden somewhere between the first and tenth floors," Dr. Aurelius told him. "I should suggest that you do not allow it to be touched. Seal the room, and I will have a crew here from the Bureau of Standards by six o'clock in the morning. Also keep the bank of offices upon which the breaker operated untouched as far as you can, until I can get in touch with Breathitt of the Secret Service. He will know what to look for, and will instruct his local men some time during the night."

I HAD been so impressed with his calm certainty that the danger was over, that the sudden thought it might not be, gripped my heart. I ran to the edge of the Roof and looked down into the street.

It was crowded, with the police, their tan helmets so many pale dots, evidently trying in vain to preserve order. Ambulances were clanging here and there, and the crimson gleam of fire apparatus shone up the intervening forty stories. The windows up and down the street were alight, alive and crowded.

"What a man!" I breathed in involuntary admiration. No other human being that night could have done anything but stand helplessly and await death, trapped on the Roof by an ever-nearing scythe of death, or escape while there was yet time. Yet in a matter of minutes he had met and stopped the first attack of the greatest war in history, for so I was already characterizing it in my mind.

I ran back to the plane. Dr. Aurelius was already there and looking about impatiently. He merely grunted—I can find no other word—when I assured him that the danger was over. The cloudbreaker again was stabbing vertically into the overcast sky. Mary was sitting white-faced and huddled beside him.

"The next time I'm going with you two!" she said.

"I am a better newspaper man than you, Robert," said Dr. Aurelius. "The mayor thinks the ray was restricted to a comparatively small area, not over a quarter of a mile in radius around the Wrigley building. He estimates that there were possibly 40,000 deaths, judging by the average number of persons to be found below the tenth floor of this area on a weekday night. Better get your office."

The plane was already speeding smoothly through the night sky. While I attempted the not-always successful job of establishing radi-phone communication from a speeding plane, Dr. Aurelius, in low tones, told Mary and McNab's assistant what had occurred.

When I got the chief finally—perhaps half an hour after we left Chicago—I dictated a long story of the night's happenings, suppressing our knowledge as to the nature of the beings supposed to have operated the death ray, but linking up the massacre in indirect but unmistakable fashion with the death of the President and those preceding it. Once or twice Dr. Aurelius whispered caution to me when I became too specific.

The chief's questions led to additions, and the lights of Washington were gleaming dimly ahead before I relinquished the phone and sank back in utter weariness. The chief told me they had received nothing from the Chicago office, but a number of vague bulletins from surrounding cities as to something terrible which had occurred there. He feared for Tilson and our Chicago staff. Alas, he was right, we learned the next day, and poor Tilson had made his last irreverent joke. Our office, at the base of the Loop, was directly in the path of the destroyer.

Dr. Aurelius seized the phone as soon as I had finished, and hailed a sleepy McNab out of bed. Dr. Aurelius told him in a few words what had happened in Chicago, and I noticed with what extreme care he spoke. He made an appointment with McNab for eight a. m., and I shivered and glanced at my watch. Much to my surprise, it was only three a. m. When we descended upon Dr. Aurelius' roof, Mary led me into the house and announced firmly I was to sleep there. I was too weary to resist, and in five minutes was asleep in a guest room between snowy sheets which smelled of lavender.

CHAPTER IX

The Ultimatum

WHEN I awakened it was ten o'clock. I sprang up, bathed and shaved hurriedly, and descended to the dining-room, where I found Mary waiting. She told me the office had been trying to get me, but she wouldn't disturb me. Her father had gone at eight a. m. to see McNab and at nine was to have gone with McNab to a meeting of the President and the cabinet. A copy of a morning newspaper lay at my plate. It was with the greatest thrill of my life that I seized it and saw my own Chicago story, under my own name, with great black headlines above it. It was preceded by a bulletin to the effect that the number of dead had later been estimated at about 38,000.

When I reached the office at eleven thirty, the chief and the staff greeted me with exultation, tempered by a sober feeling, such as I had never met before among them. My story had been the world's only news of the Chicago massacre for some hours. Offices and staffs of the competing news services, except for members off duty, had been destroyed as was our own, and the survivors had found it exceedingly difficult to get news. Drawing me into his private office, the chief informed me my salary was raised $100 a week and that I was to receive a bonus of $1,000—words which meant only "Mary!" in my mind.

I judged I dare not longer alone carry the burden of

what I knew, so, vowing him to secrecy, I told him what I knew. I had to argue against "spilling" any more of the story than would leave the enemy believing they faced a dazed, frightened and defenseless humanity. I believed they would be aware of it almost as soon as the "Pollies" squawked it out. While I was convincing him, the tremendous event of the day was occurring at the White House. I append the account dictated for me in Dr. Aurelius' own words. He has not seen this history, nor will he until it is printed. Regardless of our present relationship, I want the world to know exactly to whom it owes its present respite, and he would censor this history drastically if he were to read it.

The account as given by Dr. Aurelius:

"I FOUND that McNab, to whom his secretary had reported, had ordered the only battery of artillery within 500 miles of Mt. Seldon, the ancient motored 5.9's of the Montana Patrol, to be transported by heavy plane to the entrance of Wymont National Park, forty miles from Mt. Seldon, thence to proceed under their own power to within twenty miles, where they would be within range of the mountain. He had also ordered a secret survey of the country's resources in cloudbreakers, so strangely, it would seem, turned into a practicable weapon of defense. I was somewhat dubious of the value of the artillery. I understood that its only function for forty years had been to fire salutes on the Fourth of July, the scattering of disease germs and poison gas over civilian populations having superseded entirely the old methods of warfare and having led to the International Agreement of 1983.

"McNab had also ordered secret mobilization of all state guard units of the National Patrol, and had given stand-by orders to the American units of the World Patrol then present in this country. I understood the total strength was about 3,000 planes, beside land units, counting the state organizations, aggregating about 80,000 men.

"I reminded him that these weapons, while useful enough in subduing native uprisings in Africa, perhaps, were futile and useless against the present enemy, and that such weapons, the effect of which we had seen at Chicago, probably were minor affairs—their machine-guns, so to speak—and could be easily transported and set up quickly and secretly. What we should have to face in the war now beginning, probably would be much more powerful.

"At this point we were interrupted with the word that the Cabinet had been assembled ahead of time and would be glad to see us. Proceeding across the street to the Executive Offices, we passed through a curious, white-faced crowd, many copies of morning newspapers with my young friend Born's story being displayed, I noticed.

"I have never been at my best before politicians—as witness the niggardly appropriations given by the Bureau of Bio-Physics—but the sober-faced sixteen men seated around the long table—their chief the youngest of them—paid grave attention to what I had to say. I heard a murmur or two of incredulity in the first few minutes, but thereafter they hung upon my words with deepest attention and growing consternation.

"As I completed my resumé of the situation, and reached the point of recommending measures of defense, a messenger came in and whispered to McNab. He rose, excusing himself quietly to the President, and went out. In a few minutes he returned, and I noticed that his normally ruddy face was white as the paper in his hand. I instantly ceased, and McNab, gathering the eyes of us all in one comprehensive glance, said:

"'Half an hour ago, a message was received at the radio section, couched in the secret code of the Peace Department—the code we use for inter-department communications. It was decoded at once, and a copy was sent over here to me. I can do no better than to read it:

"'To the President of the United States:

"'We, from the planet you call Mars, have found it necessary to colonize your planet. The demonstrations we have found it necessary to make have not been undertaken as acts of war, or as punitive measures, but so that you might realize that resistance to us is useless. Our armament is sufficient to exterminate the population of this continent and of your planet, but we do not now see the necessity for doing this——'

"The reading was interrupted at this point by a Cabinet member—a fat man with a hard eye, who had been chewing a cigar during the whole interview. I learned afterward that he was Manton, Secretary of Communications, a product of Chicago ward politics. He leaped to his feet.

"'Bugs writin' messages in good United States!' he cried furiously. 'Mr. President, I think this a frame-up, and I think this guy is at the bottom of it. McNab, you otta be ashamed of yourself. They'll be askin' a hundred million dollars put in a holler log next, or some cheap graft like that!'

"I need not say I was furious at this, and was about to make some hot retort. Indeed, the fellow shrank back in his seat when he saw my face. But the young President, who had been quietly sitting with his chin cupped in his hands, his face pale and care-worn, said: 'Proceed, Mr. Secretary,' and McNab proceeded:

"'——since those portions of your globe best suited to us are those which you have not been able to colonize because of climatic conditions. There is no reason why we should not live side by side with mankind, but we do not intend that you should mistake the situation. The weapons of which you have observed the effect, are nothing beside those with which we are equipped. We are some thousands of your earthly centuries beyond you in evolution, and our science is correspondingly advanced. We have been upon your planet for about sixteen of your earthly years, and have made an intensive study of your organization, as you will perceive from our use of this code.

"'You will therefore appreciate the moderation of our demands. We demand only that all territory of the United States above 10,000 feet in altitude above the sea be ceded to us by treaty. We shall keep within those limits and we shall see that all others remain outside them.

"'Your answer is to be cast from Station NAA at 12 noon, Washington time, on the fourth day after receipt of this message, on a frequency of 17611 kilocycles. We shall expect you to have formulated a treaty, following the terms laid down, and shall then give you further directions.

"'Ron, Commander.'

"An excited babble arose in the room as soon as McNab had finished. The President stilled it by rapping sharply for order.

"'How many persons know of that code, Mr. McNab?' he asked.

"'Not more than fifty at the most, sir,' he responded. 'I am confident no human being in the world, outside of our department, has access to it.'

"The President turned to me, his face graver than ever. 'Please finish your statement, Dr. Aurelius, giving due weight to this new factor,' he said.

"I must confess it took me several seconds to collect my thoughts. I assured them I believed the message was authentic, and pointed out to them that with sixteen years in which to work, beings as intelligent as our enemies were, could be expected to have a more or less complete picture of our civilization. I emphasized

that we had greatly relaxed our vigilance against espionage because of the peace of the world, and that such defenses as we still had set up had been against man, not against creatures so small they could lurk in any corner, and so intelligent and so powerful that few of our secrets could have remained undisclosed had they chosen to attempt to discover them. I said, in short, that we were up against what might be termed 'the menace of the little,' and that all our thoughts must be recast to meet it, and must be recast at once. I did not have the slightest doubt that a failure to commence negotiations by the time set in the ultimatum would be met by punitive measures far more severe than any we had experienced, and I reminded them of the barrier set up to the flow of power at Boulder Dam. That, I said, was undoubtedly a test of one of the enemy's weapons, and undoubtedly not the deadliest, as it had occurred several years ago. I asked them to imagine what would happen should the flow of electrical power be stopped. I could read the answer in their faces—quick panic and starvation, so greatly had our softened race come to depend on it.

"Then I said that our enemy was undoubtedly vulnerable and reminded them how quickly the Chicago massacre had been stopped with a cloudbreaker. The President called in a messenger at this point, and whispered to him. I said we had our choice between capitulation (which undoubtedly would mean eventual slavery), honorable war, or to strike suddenly and savagely as we would at an invasion of vermin.

"The messenger came back at this point followed by Breathitt. The President stopped me to ask Breathitt to report upon what his men had found at Chicago.

" 'A dome-shaped metal thing like a big bee-hive with studs on the side of it, in a room on the forty-fifth floor, with what my men said looked like two big ants—scorched by the professor's cloudbreaker—' he added, looking at me.

" 'And another similar metal thing, smaller, at the bottom of an elevator shaft. There was wiring between the two, down the shaft.'

He was dismissed, and the President looked at me and said:

" 'Gentlemen, it appears Dr. Aurelius has richly earned the right to advise us, as he is apparently the one man in the world who has perceived our danger and taken steps to meet it.'

"I could feel myself flushing at the compliment, but I proceeded:

" 'If the Cabinet and the President should decide upon resistance'—there was a sort of simultaneous growl from most of those present, which sounded like so many dogs catching sight of an enemy—'I should advise that you vote the President powers to meet the emergency, so far as it may be done without Congress, and let him and his close advisers instantly decide what is to be done, and do it. I have suggestions for defense' (I was about to advise that all our forces be thrown against the west peak of Mt. Seldon, but a thought stopped me) 'but I think we had better reserve them. This very meeting may be watched.'

"They jumped at this, but the President signified that the meeting was at an end. When all had gone—except McNab, whom he signalled to remain, the President asked me in a low tone what I had been about to say. I replied that I advised throwing all our resources at once against the west peak of Mt. Seldon in Wymont, because our observations showed that the west peak has only three-fourths as much mass as it should have, and it has undoubtedly been hollowed out into the enemy General Headquarters.

"They questioned me closely, and it was another hour before I was released."

CHAPTER X

The Mystery of the Mountain

NOTHING would satisfy my chief but that I must proceed to Mt. Seldon again next day. He seemed to think that having gotten one big piece of news by such a trip, we should have luck each time. As it happened, he was right, but I begged and pleaded with him at the time. I felt that I was his only link with the man who could give us more news than any other man alive. But I went away at eleven that night, defeated.

I noticed as my plane rose from the roof that the Peace Department Buildings were ablaze with light. The chief had lent me his coupé, capable of 600 miles an hour when high enough and straightened out, with a full supply of synthol in its tank, sufficient for fifty hours' flying, or more than enough to carry me around the world. I proposed to leave at 8 A. M., which would give me half a day of stamping and swearing in the snow of Wymont. Before going to bed, I called up Mary. "Oh, Rob," she exclaimed, all the sleepiness banished from her voice as she heard the news. After a second's silence, she asked when I was leaving. I told her.

When my alarm clock jangled at 7 A. M., and I had descended to breakfast, feeling that a week's sleep would have been insufficient, my landlady grinned at me.

"They's a young lady waitin' to see you in the parlor," she said.

It was Mary, surely enough.

"I am going with you," she announced, "if you'll give me breakfast."

To my protests she only said gently: "Robert, you are a hundred years behind the times—a hundred, at least."

I felt that we would have a safe and uneventful day, and frankly, the temptation was too much for me. We ate side by side, alone except for my smiling landlady, who outdid herself in the breakfast. Then Mary disappeared with her and came back clad in a fur-lined flying suit which just revealed the tip of her adorable nose and her two bright grey eyes. My spirits rose as I gave the splendid plane her head and we streaked west at the 8,000-foot private speed level.

After an uneventful four hours in the air, we descended and came to earth upon the same plateau as forty-eight hours previously. Far below and to the right, I caught sight of what seemed like a group of toiling black ants in a mountain pass. They leaped to view through my glasses as a group of men toiling around a huge object drawn by a tractor, with a canvas-covered snout pointing at the sky. Artillery! I laughed and then swore at the futility of it. A large plane buzzed across the plateau behind us and diverted my attention. Then, for the next half-hour I was "off-duty." It was too delicious an occasion—alone with the girl I loved—for me to preserve a strict watch. At the end of that time, however, Mary was looking through the glasses at the toiling tractor, and suddenly said, in an altered tone: "Why, how strange!"

She handed the glasses to me, and I saw that the artillerymen had struck a stretch of smooth road, steeply sloping toward Mt. Seldon, which had been wind-swept clear of snow. The tractor was running erratically down this stretch, with the gun crowding upon it. Two men lay huddled in their seats like sacks of fur clothing. Even as I looked, the tractor and gun seemed to gather speed like a huge running animal, and plunged off the road with a smother of snow. It seemed to hang for a minute, and then disappeared. Sweeping my glasses up the road. I saw more huddled heaps lying in the snow.

Another exclamation from Mary drew my attention. Her hand was at her throat and her face was white. "Rob, I've been along there in the summer, and there's an eight-hundred-foot drop," she almost whispered. Then she suddenly cried: "Oh, how terrible!" and covered her face with her hands.

I looked again at the road. It seemed to me I could detect a flicker like rising heat waves, through the glasses. I shook my head impatiently, but it persisted. Sweeping my glasses still further back up the rise, I could see another tractor just coming into view. Men ran forward to see where the other had gone.

"Oh, they must be stopped!" Mary cried.

"Yes, and this is story enough for one day. I must get back with it," I said. To be quite frank, I wanted to be gone as quickly as possible. The point where the tractor had plunged was only some three miles nearer to Seldon than we were.

We leaped to our seats, and I started the plane. It rose heavily and sluggishly. I attributed this to the cold, unheeding the fact that synthol and lubrol are unaffected by the cold, until I suddenly realized that I was not succeeding in my fight to head the plane away from Mt. Seldon. The plane seemed possessed of a devil. It side-slipped and bucked and plunged, and spun, and fluttered ever nearer and nearer Mt. Seldon—the west peak! Cold sweat broke out on my face. I remembered the thought that had flashed through my mind as I watched the gun disappear—that it had run into some devilish ray-barrier set up for a protection by the evil forces in the mountain. As we steadily sidled nearer the mountain, the plane straightened out like a horse that had been given its head, and at last darted toward the saddle-back between the two peaks. A thousand thoughts flashed through my mind, for I had no more doubt that we were going to our deaths, drawn by some mysterious and compelling force, than I had of our existence. I half-turned to Mary, to ask her forgiveness, before it was too late, for bringing her along, but my glorious girl smiled steadily and proudly into my face, pressed my hand, and leaned against my shoulder.

"As well this way as any, Bob," she said, her mouth against the furs over my ear.

We waited for what seemed an eternity. Then the plane swooped slightly and came down with a long run upon the snow. We were facing the vast menacing bulk of the west peak. Its shadow hid the sun, and the chill and darkness of death struck into my soul.

We were scarcely a hundred yards from its rampant, which towered in snow and stone a thousand feet above us. As clearly as if a voice had spoken, came to my mind the command: "Alight, and walk to the mountain."

I glanced at Mary. She was looking at me, and I knew the same message had come to her.

"There's nothing else to do, I guess," she said, with a smile which she strove to make brave.

So we got stiffly out of the plane, and walked side by side up the almost-level slope of snow, through which a boulder protruded here and there—I still see the crust of snow on those boulders in my dreams, and wake up covered with cold sweat. I took her hand in mine, and we kept our heads up, though we both knew we were walking into the unknown—and a more terrible unknown than had ever before confronted human beings.

CHAPTER XI

The Terrible Mountain

I HOPE no other human being shall ever again experience such a horrible moment. It was useless to run; yet it required every bit of self-control I had to prevent myself from snatching Mary in my arms and running away, anywhere. At any second some deadly ray might strike! I gritted my teeth with the bitterness of it. But glancing at the girl by my side, my heart rang like a bugle. She was walking steadily, proudly, with her head held high, nor was there any quiver in the warm gloved hand which lay in my ungloved one.

We were close to the cliff by now. I do not know what I expected, but certainly what I did see startled me. As we clambered painfully up the snow-covered boulders and talus and stood within a yard of it, a section of what seemed like solid stone began to move smoothly aside, revealing an aperture evidently shaped by artificial means, but not big enough for a human being to enter without stooping. The air rushed past us into this opening, whining and whirling, and bringing the snow in stinging eddies past our faces. The same inarticulate voice sounded within my brain: "Enter!"

We looked at each other. Not even at the moment of death will I feel more certain that I am leaving our world forever. Then Mary, always the braver, stooped and entered, drawing me with her by the hand. Our eyes were dazzled from the snow-glare, and inside there was only impenetrable blackness. I heard a sliding rustle behind me, and the wind, as it passed by me, lessened. I turned my head just in time to catch a last glimpse of the eastern peak, dazzling in the sun and framed in glorious blue sky. I carried the precious memory of it through some of the longest hours a man ever passed. Then the door closed entirely.

As I turned my head again, I heard a gasp of astonishment from Mary. Then the painful attenuation of the air struck my lungs too. Thin as it had been outside, it was thinner here, and there was a peculiar acrid quality about it which registered disagreeably on the nostrils. My limbs became heavy and I sank to the floor. Then there was a whistling sound from somewhere in the darkness before us, and instantly my panting lungs recognized that more air was entering. As we lay irresolute and recovering our strength, I felt the same half-tackling, half-auditory sensation in my brain as on the two previous occasions, and knew we were being bidden, or led, to move toward the right.

My eyes had become somewhat accustomed to the gloom, and I could see that we were in a rounded tunnel, with flattened flopr. From the walls and floor seemed to glimmer a ghostly light, just sufficient to allow me to see their whereabouts. A darker space to our right seemed to betoken a small door, of the same size as that through which we had entered the mountain.

Mary, as always quicker than I, stirred and stood up. With her mouth close to my ear, she tried to whisper something which the thin air and my weakness prevented my hearing. I stumbled clumsily up against her and we felt our way toward the blot of darkness. The darkness seemed to recede before us, and we slowly followed a perfectly straight, narrow tunnel, whose walls glimmered just sufficiently with that ghostly light to permit us to follow it.

At length I heard another sliding rustle before us, and a gush of warm air struck my face. The gray outline of a lighter space appeared and we stumbled into a larger chamber. It was lighted sufficiently—from everywhere and nowhere, it seemed, for I could detect no source of light. We could see that it was round, high enough toward the center to enable me to raise my head fully, and it was hive-shaped. The door had rustled shut behind us, and I drew in the comparatively warm thick air with a gasp of relief. Steadily, it seemed, its thickness and warmth were increasing. In a minute, as we stood huddled there together, our numbed hands began to tingle.

And—nothing happened. It seemed an eternity as we stood there. Mary put her face up to mine, and whis-

pered: "Rob—what I was trying to tell you back there—I feel in some queer way that they intend us no harm, at least not now. Don't resist—don't do anything mad and brave; let's keep cool and see what happens."

I pressed her hand fiercely, and we waited again. Suddenly I became aware that something had appeared on the wall before us. My eyes stupidly traced the outlines before I saw that it was simply the huddled shadow of us in our flying-suits.

We turned quickly. I shall never forget the sight which confronted me. Sometimes I dream of it yet, and awaken in a cold sweat, with Mary's comforting hand upon me. The light was coming through a large cleared space in the side of the chamber, covered like a window, with what looked like plate-glass. Through it a group of creatures were regarding us, and even my painfully dilated eyes recognized them as of the same species as the one whose body I had seen in Dr. Aurelius' office.

Needle-like antennae quivered furiously; huge goggle-like lenses, in that crazy triple arrangement, stared at us; a gray shiny skin or covering added to the horror. Two of them, in the center, were much larger—or their heads were much larger than the little body in Washington. The heads were as large as my fist, his to the left as they stared at us slightly larger than his to the right.

MARY giggled hysterically. She brought me back to consciousness, as it were, from my spell of amazed staring.

Then I felt the same half-tickling, half-chirping sensation or suggestion within my head, and it formed into words within my brain. I can not explain or express it fully; but I am sure there were no words, until my brain formed them out of the impulses—as radi-impulses travel through space and are translated in your set into sound waves. Only this process was much more uncanny than that familiar phenomenon, for these creatures, of course, could have no common language with us, unless these were their linguists and interpreters, who had trained themselves in our earthly tongues.

At any rate, I quite clearly understood the question. These creatures were asking what I was.

Through my consciousness, before I could control or inhibit it, flashed the same sort of mental images which form when you are asked your name by a stranger. Your name, your home, the familiar scenes of your habitat flash upon you, before you can open your mouth to reply. I started to speak, but already that sensation of tickling contact was again beginning in my head. The antennae of the strange beings behind the transparent curtain were waving excitedly. I noticed stupidly that they seemed to be standing up higher on their fore legs. This time the question formed as to my occupation. Before I had time to speak or refuse to speak, a stream of sensation and memory flashed through my head again, like this: "Washington newspapermanDr.Aureliusdeathsantlikemysterywhatarethey." And again the tickling questions began.

I realized in a flash of panic that they were reading my brain's responses. The words seem incredible as I write, and the whole adventure seems dream-like. And it so happened, Mary and I and one other—now dead, Heaven rest him for a brave man!—were the only human beings who are known to have undergone the experience, and in my previous relations of our adventure, that has seemed to other persons most incredible. Nor do our psychologists encourage me. Nothing in their experience, they say, leads them to believe it would be possible, by creatures of whatever higher intellect.

My answer to all this and Mary's, are that the thing did happen. It is one of the Enemy's weapons to which we have no present clue.

In another flash of panic I realized what it must lead to. I realized that aside from Dr. Aurelius I probably knew more than any living man of what the world planned in defense. I would inevitably betray him as the human being they had most to fear; and their next assassin would not blunder. I wet my lips, and shut my eyes. I strove desperately to think of the solar system series; to fix my mind upon the color of Mary's hair; to think of anything or everything which could fend off this horrible inquisition. I felt the gentlest possible pressure inside my head, and if it were not physical as well as psychical, my sense betrayed me. When I could stand it no longer, I opened my eyes again. The larger of the two creatures in the center of the ant-like group had raised himself still more and his antennae were pointing directly at me.

I glanced at Mary. She was watching my face anxiously with her eyes wide. I looked back—I could not help it—at the pain of inquisition. The tickling questions began again. And bit by bit, although I fought to prevent it until the sweat rolled down my face, although in the bitterness of my shame I prayed that I might be stricken dead before my brain could form the betraying images or words, those devils wrested from me everything that they apparently wished. My brain formed the images of the Chicago massacre and the cloudbreaker fight, and their horrible antennae again quivered excitedly. Everything—everything that they asked for came out, and I swear I aged five years in the time of the inquisition. I could not look at Mary nor could I return the gentle pressure of her hand. She told me later that she felt the questions too, and that her brain, too, automatically formed answers before her will could prevent it; but she did not know how successful I was in the fight, and was praying for me, as she did not believe they were paying any attention to my answers.

But it did not avail. I thank Heaven I did not know of the cabinet meeting, or of the measures for defense which even then were being formed in Washington. They would have come out, too, and what a different ending—what a ghastly ending for us—might have been written to this history. It might only have been written or preserved in the archives of the Enemy.

It was over at last. The creatures seemed to be waiting. Instantly, and quite without my volition, my brain projected a picture to them of Mary and me, outside, safe, free, entering our plane—a wild plea which rose from my subconscious self. There was no answer. The light behind the panel flickered out, and we were again in the dark. That sensation, now familiar in my brain, pressed us again to the right. We obeyed as quickly as our eyes could grow accustomed to the near-darkness. An open door awaited us, and we went for some distance down another low corridor beyond, half-domed as everything seemed to be here in the bowels of the mountain. We heard another door rustle aside, and a light greeted us. Upon entering, I cried out in astonishment. The room was small, round, hive-shaped, as, indeed were all others we saw, and the walls glistened granitic. Only a chair, a table and a cot stood there; it was perfectly dry, and a stream of water issued from a hole in the wall six inches above the floor, ran through a channel cut in the stone, and disappeared gurgling down an opening in the floor some six inches in diameter. Upon the table gleamed a globular light, tiny, like the bulb of a child's Christmas candle, frosted, and glowing ruddily, yet coldly.

Another door stood open on the opposite side. We hurried to this and saw it led to a similar room. Still another door led from this, but it was closed.

We stared at each other in astonishment. Mary was the first to recover. "Rob, they've counted on capturing

some human beings and pumping them, and have provided cells for them," she said. "I wonder if we are the first."

A PILE in the corner proved to be of tinned food, including milk. The cots bore upon them the U. S. stamp, and the blankets upon the cots were Patrol blankets. "They've raided some ranger's winter cabin," I said. "Poor fellow! I wonder what happened to him."

"Well," said Mary, practically, "I'm hungry."

We stripped off our flying suits and tasted the water in our cupped hands. Mary insisted upon our both tasting it at the same time. It was perfectly sweet and cold, and we drank thirstily. With my pocket-knife we managed to saw open some tins. We ate sparingly of corned beef, green beans, soggy crackers, and powdered milk mixed with the water and drank out of the emptied tins. Toward the end of the meal we were almost happy.

"Our first home," said Mary. "Well, I'm glad I'm here with you and not home worrying about you." I reached for her hand, and happened to touch the light upon the table. "Why, it's cold!" I exclaimed. I lifted it from the table and it glowed angrily in my hand, with no connection apparent anywhere. "Cold light! Of course! They are afraid of heat!" I said. Mary shuddered. "Put it down, Rob. Who knows what devilish ray they used to light it," she exclaimed.

Then we talked over our situation. Privately I considered it hopeless, although I did my best to conceal this from Mary.

"I made it my business to keep our route in my head," she said. I gasped at still another thing I had not thought of. She took a pencil and a sheet of copy-paper from the pad I carried in my pocket, and she sketched a map. It appeared that we had come almost parallel with the face of the mountain, if she was correct, with the inquisition chamber marking our furthest point inside. She thought we were only a few feet inside the face of the cliff. We put the map carefully away. Then we searched our pockets. I gave a cry of joy as I felt a tiny compact bundle in my flying suit. It was my portable radi-phone. I had dropped it carelessly into a pocket on leaving Washington and had forgotten about it. Mary snatched it.

"Shh—!" she said. "They may be listening." And she put it carefully away in her own pocket.

I stared in astonishment. "They can't understand American?" I said.

"Why not? Dad said they had been on earth at least eight years. And we've seen how clever they are. For all we know, they've been listening-in all this time, hidden somewhere, or have their own televisors, which are probably far better than our own. Poor Dad! I wonder if we shall ever be able to tell him how wonderfully he figured out what they were?"

I tried to reassure her, and then said, thoughtfully:

"Do you know, I have a feeling we are as safe here as anywhere. It is my notion they are beginning war."

She stared at me, her eyes wide, and even in the ruddy light I could see how she paled.

"Oh-h!" she said in a whisper that was almost a cry. "I never thought of that. But—but if that's true, Rob, our job is a terrible one. We've got to learn all we can—their weak points—if we ever get out, it may be invaluable." She said it in a barely perceptible whisper with her lips close to my ear.

I cursed my own thoughtlessness in what I had said, but my heart leaped up anew at this new manifestation of her bravery and foresight, which far outran my own.

We talked in whispers for a while and examined the walls carefully, particularly around the doors, hoping to discover some stud or button which operated them. The door by which we had entered had closed, although we had not noticed it, and our little suite was self-contained.

Of the contents of my pockets, only the tiny flashlight, the knife, and the phone promised to be of service.

"If we find we aren't going to get out, we might set this to the emergency wave and tell the world as much as we can before they find out what we are doing," said Mary thoughtfully, almost in a whisper. "But let's hide it as long as we can."

Finally, I bade her goodnight in as brotherly a fashion as I found possible, and retired to the other room. I was sitting heavily on the cot some time later, giving way, I am afraid, to black despair, when I heard her call from the other room, a tiny, panic-stricken call: "Rob!"

She was lying on the cot, with her blankets over her, when I ran in and looked quickly around for what had frightened her. But everything seemed quiet.

"R-Rob, you aren't going to leave me alone? What if they shut the door?" I could see tears glistening on her lashes.

I stammered something, went into my own cell and dragged back the light cot, placing it at the head of hers. When I sat down, she put out her hand for me to take. "Lie down, honey. We need all the rest we can get," she said. I lay as quietly as I could, and with her hand resting trustfully in mine, like a child's, she was soon fast asleep, but it was long hours before I fell into a troubled doze.

CHAPTER XII

The Ranger

WHEN I awakened and glanced at my watch, it was eight o'clock, and I realized that outside—only a few feet away—the sun probably was turning the snowfields into a sheet spangled with diamonds, and mantling the eastern peak with a fringe of glory. I heard light footsteps and sat up. Mary had placed food on the table. Again the bitter icy chill of full wakefulness and realization settled around my heart.

"Good morning, lover," said Mary. "Do you like your milk with sugar or without?"

We ate a little, each simulating an appetite neither of us felt, and strove to keep up a conversation about nothing in particular, which was not a success.

I strove to be cheerful, but there was no minute I would not have bargained with my life and whatever warning we might bring to the world, to have seen Mary safe outside in the seat of the plane, and a thousand miles toward home. Exactly as we finished our meal, the hated sensation which I had been subconsciously dreading, touched my brain. We were bidden to return to the inquisition chamber. Mary glanced at me significantly, and I remembered her warning that they might be listening or looking in on us through some hidden peephole, or through the solid stone down the beam of some strange ray. The door rustled open.

When we once more stood in the center of that hive-like room, shivering partially with cold and partially with nervousness, the minutes ticked by silently, while we strove to find with our eyes the location of the panel of the night before. Suddenly it glowed before our dazzled vision. Its occupant was alone, but his—I use the gender only for convenience—huge goggled head was thrice the size of the largest of those of the night before. Fully six inches in diameter, it seemed, and we watched fascinated, as long delicate antennae twitched, and it seemed we could see a slow pulsation come and go through the leathery gray covering of the head. The fore-legs seemed too delicate to carry the weight of that great head.

A slow, measured question beat within my brain.

"What are you?" It was like the tones of a bell in comparison with the scratching whisper of my first inquisitor. I set my teeth, and desperately began to bargain. Nothing that my will could hold back would I tell this creature, I said to it silently, unless I were given assurance that my companion were released. There was a pause, with the impassive goggles considering me. Then unbelievable symbols burned themselves into my brain.

"You may both be released"—a pause—" in two days of your earthly time."

I gasped in amazement and joy. I felt Mary seize my arm. The message continued to come.

"We desire that you act as messengers to your"—pause—"masters. We desire that they see the futility of resistance to us. The intelligence of both of you tests high—for your kind. That is not true of the other human."

"The other human?" My silent amazement projected this question automatically.

"We have captured one other alive. Others fought us, so that their destruction was"—pause—"inevitable."

While I was still amazed at this news, the inquisition began. I offered no resistance, and do not apologize. It would have been futile in any case. My hour the night before had tired me unbelievably. And I desired to be as strong as possible.

This creature, then, learned afresh all I knew of Dr. Aurelius, and his plans and those of others, for resisting attacks. Several times my message was cut off, and as it were, hurled back upon me. At these points I had deviated slightly from my account of the night before, I realized quickly, and this creature, apparently with mental notes of that interview, would message: "You said before—" At other times he apparently directed his questions to Mary. She answered with promptness. Then the mental searchlight swung back to me.

When the questions ceased to come, I stared straight at the creature, and asked aloud: "Do you understand English?" There was a pause, as if it were considering, then: "We understood it in one of your months after first coming to the planet." Then the panel darkened, and we understood we were free to go.

Back in our cells we sat on Mary's cot a while and discussed the morning's events. We discussed trying to use the radi-phone to communicate with Dr. Aurelius on the emergency wave, but decided against it, at least until we had more to communicate than a mere warning.

THERE was the light rustle of a door, and turning my head, I saw that the door beyond my cell had opened. Our astonished eyes saw the figure of a man framed weirdly in ruddy light within it. He had one hand to his forehead and seemed to be trembling violently. His clothing, although ragged and torn, was the unmistakable uniform of a forest ranger. We saw this as he came forward, and his face was half-hidden by a black beard.

We sprang to our feet. "Who are you?" I cried.

He did not answer. Staggering slightly, he came slowly across the floor and peered into my face.

"They got you, too, did they?" he said. His words came slowly and he seemed to have some difficulty in speaking.

"Yes. How long have they had you?"

"What day is it?"

"About February third," I answered after some hesitation.

"What year?" Amazed, I answered:

"2029."

"What? I thought I'd been years in this hell-hole. They got me on Thanksgiving eve. Woke up to find 'em all around me. I thought I was havin' 'em again."

Suddenly he laughed—a wild laugh, with such a dreadful note in it that we started back, and Mary clung to my arm.

"It's so good to see a human face again. It's so good! It's—so—good! I guess I'm half-crazy. Lord knows I ought to be."

Holding his eyes as hard as I could with my own, I began to tell him in a quiet, conversational tone who we were, and how we had come. I could see a more intelligent glow come into his eyes minute by minute. At last he held up his hand.

"Thanks," he said quietly. "I was pretty near off my nut for a minute. Name's Johnson—forest ranger—and I'm sure glad to meet you folks. Have they put you through the third degree yet?"

"They've started, at least," I said.

"I guess there ain't a question in the book I ain't been asked," he said. "Mostly about trees and things like that, after they found out what I was. How they brought me—you mustn't think I wasn't willin' to put up a scrap. I'd seen their devilish lights flarin' through the mountain-top, and I guess I was pokin' around a little too much for their comfort. Anyway, I woke up that night and you can imagine my feelin's when I saw what looked like about a thousand big gray ants swarmin' all over the room. I couldn't move. One of 'em had a little black box focussed on me, and I was knotted all up inside—like when you touch a live wire, or git in the way of a power beam. I sure thought I'd reached the end of a mis-spent life. They cleaned out the old cabin—fetched everything, and me, too, bundled up in my blankets like a baby. How they done it I'll never tell you, but they're powerful little brutes for their size. And what they ain't done to me! They've put rays on me and looked through me like I was a pane of glass, all chitterin' and squeaking together. They learned about the human frame from me."

Mary, at my side, gave a little cry. "Oh, how horrible!" she said. "You poor man! How you must have suffered."

"Oh, I can't complain, Ma'am. I feel about as good as ever, except I sure would like to see the sun. I'd sure have been bugs in another week. If they hadn't fetched my Bible and my Kipling's poems along, I'd have gone off before this. They left my radi-phone and I tried to phone out, but they busted the thing on me."

I began to question him. I found that outside our small suite—there were two more rooms in it beyond his—the mountain was hollowed into tunnels and halls, all of which were kept very cold and with very thin air. They put on him what he called a monkey-cage, when they took him to their laboratories. I gathered this was something like a diver's suit.

"Your head feels awful light and queer inside it," he explained. "You feel all wrong somehow."

According to him, they had machines of infinite variety and some of immense size. He could give no idea of the machine which had bored out the mountain, except that it was like a big metal worm.

"She just bores through the mountain—makes the rocks awful hot, and then the granite just ain't there any more. They run it from a distance. When they want to make a room, like this, they follow up with another machine that stands in the middle of the bore, and the rock just melts and disappears from around it. Say! Have you found out how afraid they are of heat? I think they cool the rock off some way, but even at that they let it cool off for a week before they go near it. I struck a match one day near a group of them, and they all twittered like I'd held it to 'em and ran away."

He led us to the walls, and showed us that their glaze

was simply fused granite, through which the grain of the rock was plainly visible. All the time he kept darting glances about, and once, when I started to say something about the possibility of escape, he laid his finger to his lips.

"They can watch right through the walls," he said, "and they'd be especially likely to listen in on us meetin'. I've got so I think I can tell when they're doin' it. They can't—or I don't think they can—read your mind unless they've got your direct attention."

He was much interested in the theory that they came from Mars, and said: "I thought they had come from Hades. I sure have repented my early misdoin's the last few weeks."

Mary began preparing a meal. "Come into my shack," the ranger cried. "You're sure welcome." He led the way back through the door by which he had entered. The room was similar to ours, except that on one side, in a hollowed out recess, there glowed what seemed like a log, flat on top. It was hot, and the heat was grateful. I became conscious we had not been actually warm since entering the mountain. "They fixed that up for me, I'll have to give 'em that," he said. On his table lay a Bible and a battered thin-paper complete edition of Kipling's poems.

By the "fireplace" were ranged neatly a few cooking utensils. Mary darted at these with a glad cry. She worked while we all talked, and a half-hour later we sat down to a warm, though meager meal. My first sip of hot coffee was heavenly.

We talked while we ate, and I told the ranger of my belief that they were planning war, and of the happenings in the outside world. His jaws stopped working.

"If they are, we ain't got the chance of a snowball in Hades," he said quietly. "I don't know anything about war, but I know they've got a lot of stuff here we can't match. I ain't never seen the king-bee of 'em all, but I'll bet he's got a brain like a barrel, and has forgotten more than the thousand brainiest men on earth ever knew. They look at us about as we'd look at an insect or an animal—to be let alone if we're harmless, but to be wiped out if we get in the way. Say, I'd have sure liked to see a normal insect, the last few weeks.

"Why, I've been a quarter-mile inside, and the farther you go, the grander it gets. They've got the whole mountain hollowed out, and no human being ever knew a thing about it until me, I guess, and then only because I saw what seemed like the 'rora borealis playin' around over here. They're so little, too—their soldiers and scouts. If they wanted to, they could have hid 'most everywhere in the world and heard just what they needed to know. I'll bet they've got a thousand scouts hid out in the world now." He thought a minute.

"They took my televisor and 'phone away after I tried to use the 'phone. And I'll bet they knew more about 'em in an hour than the men that made 'em. Asked me a question or two, but it sounded to me like they just wanted to find out how much I knew, which wasn't much."

Nor could he understand why the morning's inquisitor had hinted that we might be allowed to go. His eye wandered to Mary. She took the hint and went into the other cell. Then he leaned over to me and said:

"Don't make any mistake about these babies. They ain't got no vitals no more than a machine has. They've always got something up their sleeve. You can bank on 'em in a way, same's you can bank on a machine. But if you was in the way, they'd grind you up quick as a train of cars would run over you—and they wouldn't think no more about it. We—we just ain't human, to them. Same's we feel about them, I guess. That—that your girl?"

I nodded, for the question was wholly friendly. He sighed, seemed about to say something, but thought better of it. Finally he said, only: "Keep her close to you."

CHAPTER XIII

Ominous Wonders

FOLLOWING the hint, we went back into the room with Mary. As we stood there talking, that dreaded sensation in my brain—one I had come subconsciously to dread, no matter of what else I was thinking, came to me. I glanced up quickly and saw that Mary and Johnson had received it too. We stood up simultaneously, for it had directed us back to the inquisition room. When we arrived, having first stepped into our flying-suits, the room was glowing with that ghostly light, which seemed to come from everywhere and nowhere, but no panel was lighted up. There lay on the ground three flattened shapes, and Johnson groaned at sight of them. "The monkey-suits," he said. "We put 'em on."

This was not difficult to do. We simply stepped into them as into one-piece pajamas. They fitted tightly around our wrists; so tightly, indeed, that I felt a partial stoppage of circulation. There were three bags of some transparent material on the ground, with lines attached to them. These, Johnson told us, were helmets. As we pulled them down over our heads, they snapped to the collars of the suits, as if the two were magnetically attracted. There was a hiss from the line which came into my suit, and I realized air was entering. It puffed out the helmet somewhat, and I could feel air escaping slowly around my wrists. My heart was beating madly with excitement and suspense, but there was something more. I felt curiously light, and in some way disarranged internally. I found I felt stronger, and as I took a step I went farther than I intended. A door stood open behind us, seeming to lead to the bowels of the mountain. We went through it, and our lines floated behind us in the air, seemingly unreeling without effort from the hidden recess in the walls whence they came. The floating sensation increased, and I glided along as in a dream. The scientists tell us the suits probably had in their composition the slightest possible anti-gravity effect. As worn by the Enemy, they say, this material probably reduced the pressure and gravity inside them to an approximation of that of their home planet.

They were inflated or held out against the pressure of our atmosphere by some perfectly balancing repellent effect exerted by something worn or carried on the bodies of the Enemy, or inherent in those bodies themselves. The more our scientists study the tremendous problems solved by these creatures, the greater is their respect for them, and their certainty that we must withstand a new attack from them—perhaps in 100 to 500 years. What is time to a dying race?

As the only two people now living known to have worn these suits, our reactions have been eagerly sought for by our men of learning. I can only say we floated, almost, down that corridor until another door opened right in front of us, and a rush of air impelled us forward. Our lines had at last become rather heavy, so that we were all leaning forward, and almost stumbled on our faces. But we recovered, and at once stepped out into a vast, dimly lighted chamber, so high that we could not see its roof, so large that we could not see its further side in the dim light. Apparently it was of the same beehive-shape as all the other rooms of these creatures that we had seen. We felt that the great chamber was very cold, and I took Mary's

hands in mine, partially for reassurance and partially to keep them warm.

As our eyes became more used to the chamber, I saw something at the farther side which made my blood run chill, and Mary moved closer to me. A hundred yards or more from us there rose a series of dim shapes. And those shapes, so grotesque and writhing, looked as though they might be of machinery—or they might be something alive! Grotesque great coils rose high above us, and writhed away into the farther darkness.

Then a huge panel lighted up on our left, and the comparatively reassuring gleam of metal came to me from the monstrous things. Whatever they were, they were not alive, and I breathed more freely. Then I looked at the panel, only to remain transfixed with amazement. For behind it, among a group of the active ant-like beings, I was comparatively familiar with, the workers, apparently, or the soldiers of this strange extra-terrestrial expedition, amid a closer group of beings with larger brains—like those which had already examined us—sat heavily what was assuredly a corps commander, or perhaps even the commander-in-chief, to whom the dying planet had entrusted the desperate sally which might continue its life.

Spindle-like legs supported with difficulty the throbbing mass of brain. It was fully 18 inches in diameter, clad in the chitinous material, which throbbed with its pulsations. Although the thing was fully 50 feet from us, I swear I felt the weight of its glance drive into my mind like a spear, as its goggle-like lenses rested upon our little group. I cannot express in words the cold finality of will which I felt in that look, except to say that I felt very much as some shrinking micro-organism might feel upon the stage of a microscope with the eye of a Koch or a Huxley upon it. Johnson's words flashed into my head, and I knew, once and for all, that we were less to these creatures than the beasts of the field are to us, and that if our lives had been so far spared it was because they had a purpose. And what that purpose was my shuddering mind did not dare guess. My thoughts flashed forward to a thought of what life would be like under their reign, and recoiled aghast.

Gradually the great room had lighted up. It was fully a hundred yards across, and the dome towered inconceivably high. The mass of metal opposite me, with its great cables and beehive-shaped prominences, was coming more clearly into view, but even as I started to study it I heard dimly through my helmet a door open to our right. As I glanced in that direction I was amazed to see a horse bound into the chamber. He stopped, snorting, with his forefeet spread, as he encountered the cold, thin air. His nostrils distended and he seemed to shudder. I heard Johnson give a cry—it must have been a great shout within his muffling helmet—and I saw him dash furiously forward. But he was stopped with a jerk by his life line and fell to the floor.

WHILE Johnson struggled to arise, I heard a subdued humming in the great room. A shaft of soft light seemed to come from the metal monster, and rested upon the horse. He collapsed upon his side, and straightened out with scarcely a quiver. Then a more brilliant beam, like a searchlight, flickered from the metallic gigantaur, and in a minute, while we stood with our hearts in our throats—there was nothing there! Only the thin, cold air of the great room whirled and eddied and brought a scurry of what looked like gray snow up from where the horse had lain. And from the spot behind him upon the wall and floor where the light had touched rose what seemed like smoke, and as the beam died that spot danced with an almost terrifying beauty of color, the whole gamut of the rainbow, which slowly faded. It had all taken scarcely more than a minute. As I collected my dazed senses, through my brain sounded that tolling message of the "big brain" who had examined us the night before.

"We are sufficiently equipped with both paralyzing and annihilation rays to destroy present life in half this continent at once, and our projecting machines are powerful." So my brain translated the tolling into words.

Johnson was staggering stiffly to his feet, and through his transparent helmet I caught a glimpse of his distorted face as he stared at the beings behind the panel, and I shivered—not for them, but for him. They seemed entirely undisturbed, however, and in a second I was aware that something new was beginning. It was a slow grinding inside me, outside me, all through the great room, all through the universe, it seemed to spread in a few seconds, and swelled and swelled and swelled, until it was like nothing except the death cry of a planet. Nothing less, it seemed, could have caused it, and I writhed in agony as it went on and on, deeper and deeper—sound, yet not sound. I had caught Mary within my arm as the horse died, and I could feel her shivering as I was shivering. I must have fainted for a second, there upon my feet, for what I next remember is the blessed relief of knowing that it had ceased, and that bell-like tolling was beating in on my brain like surf on a stormy beach. It made me realize that what we had just experienced were super-sonic waves projected under control, and, so my brain translated, "very useful in quelling a recalcitrant earthly population, especially in your denser atmosphere." Before I could really assimilate this, something else began to occur—my eyes began to burn, and it seemed that something was boring through them into my brain. I shut them and lowered my head with a gasp, which gave only momentary relief, for it continued to bore in relentlessly, and my eyelids, and soon my whole skull, seemed to glow with rosy light, as do your fingers held between your eyes and a strong light. This lasted only a few seconds, however, and as I gasped with relief in blessed darkness the tolling impulses informed me that this was but a fraction of the light wave gamut which they could run upon the nerves of humanity. I do not mean that such words came to me; only that from that resounding within my brain I became aware that such and such things were so. And I believed, and shuddered, and was bathed all in a minute in icy sweat, as I thought of what our beloved and familiar earth, and its inhabitants, for all of whom I felt a sick pity and a wild love, were facing. In that moment I would have hurled myself upon machines of these demons to instant and certain death, could I have annihilated them also.

Nothing more came. I stared across at the mountainous heaps of metal, but the light played upon them no stronger and I carried away nothing more than an impression of huge heaps of evil coils. There were no wheels, nor any other shape familiar to our mechanics except the coil. The hive-shaped mountain of metal in the center seemed composed of coils. I started, realizing that we were being bidden to return to the inquisition room. We walked back; once there, and the door closed behind us, I felt my helmet snap away from my suit, and I raised my hands and pulled it off. The suit fell to my feet.

As Johnson lifted up his helmet, he burst into a wild and blasphemous imprecation upon our captors.

"That was ol' Baldy, the best little bronc that ever busted a surcingle," he said when he had finished curs-

ing them. Mary gave a little cry of pity. "I been wonderin' what had happened to the poor bronco, tied in the stable when they took me, and was afraid he'd starved," he said.

But the panel had lighted up, and behind it sat our inquisitor of the night before.

His message informed us that we were to be used to tell our "masters"—apparently these creatures could think of no other relation than that of master and slave, or commander and commanded—of the weapons which might be employed against them. For the first time I learned the world had been given an ultimatum. This also was told us silently—that they had a means of stopping the transmission of electricity, which Dr. Aurelius had guessed—and that this means was sufficiently powerful to blanket most, if not all, the continent. One narrow channel was to be preserved by which a surrender might be radioed to Mt. Seldon "if," the message ended grimly, "there is war and any of your population are left alive to surrender." I was also to understand that this blanketing was to be the first offensive measure, and was to be begun at once, if their ultimatum were refused.

As the creature ceased, I asked it when we were to be released. The panel darkened without a reply. We went to our cells in a state of mind I need not describe. For the first time in my knowledge of her—and the last—Mary's spirit was broken, and she sank into a chair and began to weep. This drove everything else out of my mind, and I knelt by her side and strove to comfort her.

"Oh, Rob," she whispered. "Death, or slavery!" She shuddered. "What an alternative."

In a few minutes, however, she sat up, dried her eyes, and tried bravely to smile at me. When we looked around, somewhat embarrassed, in spite of the overwhelming nature of the occasion, Johnson was nowhere to be seen.

CHAPTER XIV

"One Chance in a Million"

HE came back in a few minutes from his own chamber. His eyes were blazing, but his tone curiously gentle.

"Son, how's your nerve?" he asked.

"Good enough or I would be insane by now," I responded with a flippancy I did not feel.

"Well, you'll need it. Come inside with me a minute. I want to talk with you." His whole air was grave, business-like and commanding. For the moment he had taken the leadership of our forces.

I looked at Mary and she shook her head.

"Johnson, Miss Aurelius is the best man of us in this room, and her nerve is as good as ours. She wants to hear anything you have to tell me."

Mary gave me a grateful look.

"All right, ma'am," he said, respectfully.

"I've been around these critters so long I've sort of got their wave-length, and I grab off stuff they don't know I'm getting. They aren't goin' to let you go."

"Shhh—they might be listening in!" cried Mary.

"No, they ain't. That's another thing I'm on to. I can tell pretty well when they are listening in, and they ain't now. You get that way. But I've gotta talk quick. They might come back on. Now, listen!

"They figger you know too much about 'em by now. They're goin' to have you talk to Washington and tell what they've got, and how useless it is to fight 'em. Then they're either goin' to hold you here or destroy you. I caught the Big Brain's orders while he was lookin' at you just now. And what he says they do. He's got 'em hypnotized. Why, they ain't but one brain around here, and that's his. He's just like a central power station. If he stops broadcastin' they'd all run around dazed, for a while at least, not knowin' what to do or how to do it. Hypnotized—that's it."

"What are we to do?" I asked. I felt stronger, knowing what lay ahead.

"Well, I'll tell you. I'd have done this some time ago if I knew what I know now. But I been havin' a kind of foolish hankerin' to see the sun and the sky and the trees once more before I died, and I been holdin' on for that. And I figger I owe 'em somethin' for killin' my poor hoss. And I figger that if you can get loose and get home, knowing what they got, maybe somethin' can be worked out to stop 'em. If it can't, life won't be much worth livin' after this anyway. They'll break us like hosses, and we'll be their hewers of wood and drawers of water.

"Tomorrow some time you are goin' to be called back to that place and you are to be told to call Washington on a radiophone arrangement they got there, and talk to the President and your father, ma'am"—this was to Mary. "You'll tell just what they want told—how scared you are and everything. If you won't, they'll put you under control and use your voice, with you knowin' nothin' about it.

"I know another thing"—and his voice sank to a whisper. "I know the central button that opens all these doors, in the big room.

"Here's my plan—and I don't mind tellin' you it's one chance in a million. Your plane is still outside, because until just now these fellows that's been dealin' with you thought they were goin' to send you back to Washington, until the Big Brain vetoed it.

"I can shoot straight, and I had my gun cached in a box and they paid no attention to it. Tomorrow we'll all be ordered back to the big room, for you to broadcast. I can shoot the Big Brain through that plate-glass thing. I take my gun along hugged under my arm.

"If I smash his brain, that means the rest of 'em will be shocked—actually shocked, like when you catch hold of a live wire, and for a few minutes, anyway—they'll just run around like ants when you kick over the ant-hill, not knowin' what to do, dazed. They all act in teamwork from his one brain.

"Maybe I knock over three or four more of 'em for good luck; then I shoot into that central button that controls all the doors. The bullet jams the works. We run back, kick off our suits, run into the open air and find your plane."

Mary and I looked at each other. Her face was white, but her steadfast eyes held mine. Suddenly Johnson put a finger to his lips, and backed into his room. His acute senses had caught some warning or message.

CHAPTER XV

The President's Chandelier

THEN I caught it, too. Mary and I were being bidden to return to that inquisition room. We were too weary to think, and mechanically paced back down the corridor. Suddenly I thought, with growing horror, what this portended. Our minds were actually coming under the control of our captors' will. Half supporting Mary, I almost let her fall to the ground. Trained—trained, like horses, or dogs, or any other useful domestic animal! Then we were there, and behind the panel sat our familiar second inquisitor.

His will bid us to look at the wall behind us. Upon it, a spot of light, struggling and drifting and swirling, was growing stronger second by second. Finally it steadied and cleared. It was like a round mirror. We gazed into it for some seconds without understanding. We were now looking at a mahogany-colored surface. Between this surface and us were three ovoid shapes, in a white light. Finally one of the spots stirred and Mary seized my arm and gasped.

"Daddy!" she said.

I, too, recognized that leonine auburn mane. Then I recognized the desk. It was that massive and ancient piece of furniture in the President's Executive Offices, over which had flowed the nation's business since the days of Hoover, one hundred years ago. Three men

The big panel to the right slowly lighted up and there sat the Commander-in-Chief of the forces of evil, with his staff around him.

were sitting in the circular white-panelled room, which had probably never witnessed a more important conference. As we were looking down upon the three figures, I realized we were probably gazing through a televisor suspended in the great crystal chandelier above the desk.

The silence was broken by the thin, far-away but indubitable tones of Dr. Aurelius. Mary gasped again, and I felt her tremble at this image of her father appearing in that icy thin-aired room, so many thousands of miles away from him. Then she steadied and seemed to resume control of herself.

A question from our inquisitor probed into my brain. "What is he saying?"

I listened, but could not understand. Slowly I realized they were talking in a language strange to me. A second man lifted his face enough for me to recognize him, and it was President Morton.

I could have shouted with relief as I replied silently to my inquisitor that I did not understand what they were saying.

Instantly my head seemed caught and held as in a vice, and a thousand red-hot needles pierced my brain. Then I was released, and as I staggered from the shock, blind and dizzy, I understood I had been subjected to a quick and terrible "third degree."

Then the demon apparently addressed his question to Mary. She fell against me as she apparently gave the same answer and received the same instantaneous stabbing examination. Slowly the picture faded out upon the wall, but before it faded, the third man, too, raised his head, and I caught a glimpse of a calm, yellowish face. "Japanese!" I thought. It was, in fact, Yamaki, the great Japanese physico-chemist, who had been called from San Francisco where he was as a consultant, to consult with Dr. Aurelius and the President. How often since have I thanked Heaven that Japanese was not among the half-dozen required languages in my university!

We returned to our cell, as it seemed our tormentors had no further need for us. We lay on our cots and talked in whispers, very guardedly, relying on Johnson's statement that they could not read our brains unless they probed directly, and we hoped that their audios could not catch our low tones.

It was not a hard decision we had to make, although we talked around it, guardedly, never directly, yet each understanding. If we had to die, we might as well die trying any desperate plan to help save the world. What did a few more days or weeks of life amount to? And there was that one chance in a million—or a billion, it might be—that we could win through, for ourselves as well as for others—those millions of others, doomed to death or to slavery worse than death, if we failed. Neither of us had any doubt that there would be no life or freedom or laughter anywhere in the world, if these fiends controlled it, until at last they drove the human race to suicide or exterminated it.

There was one thing left which we must try at once. As if casually, I produced my radi-phone and showed it to Mary. She nodded. Swiftly I set it to the emergency wave—kept sacred by the whole country for emergency calls—and pressed the studs for a general broadcast.

"Robert Born speaking from inside Mt. Seldon," I said, quickly but distinctly. "All persons hearing this message will communicate at once with Dr. Henry Aurelius, Washington, and inform him he is being watched from the big chandelier——"

There was a click inside the instrument and my voice suddenly sounded as if it were beating against a blank wall. I looked at Mary significantly. She snatched it from my hands and quickly pressed the studs. Then she threw it aside almost angrily.

"He was right," she said despairingly. "Johnson, I mean. They probably knew everything we've been thinking or talking."

"Not necessarily," I argued. "They may have something set so as to catch radi-phone vibrations and destroy the instrument automatically. He said they couldn't catch our thoughts unless they focussed directly on us, although they might catch hints of what we were thinking by indirect surveillance. Anyway, it's our only chance."

"Oh, Bob dear," she said inconsequentially, "if only I hadn't gotten you into this."

There was only one fit answer to that, and I made it.. "But I did," she said in a smothered voice. "I—I asked Dad to give you the first chance he had at something big."

"You darling! When?"

"Oh, months and months ago. I could read your mind, old stupid. You were going to be so noble and silent until——"

But I stopped her mouth again.

IT seemed only a few minutes later until I heard a sound behind me. We turned, startled, and saw Johnson. A metamorphosed Johnson. He was shaven, trim and neat, in a new ranger uniform, the wrinkles of which betrayed it must have lain for months in his box. The proud gold shield of the United States gleamed from his chest. There was about him a serene and confident air of manly dignity. He met our surprised glances with a smile.

"Fer the altars of his fathers,
"An' the temples of his gods,"

he misquoted cheerily.

"I got a hunch," he continued, "that we're goin' to have quite a picnic, and I wanted to get prettied up for it."

His spirit was so contagious that Mary and I smiled.

"What time is it?"

I looked at my watch. It was 10 o'clock, but I suddenly realized with a shock that I had entirely lost track of day and night. Outside it might be glorious morning, or it might be glorious night, with the moon and stars shining down upon an earth which we might never see again.

"Let's see," said Mary. "How many times have we eaten?"

We counted up. "I think we would probably eat about at normal times," she said. "This is Thursday night."

That point settled, Johnson said, "Decided on anything yet?"

"We've decided you have the only possible plan."

"So've I. We may give these babies a run for their money yet. What happened? What did they want to ask you?"

Briefly I told him.

He thought a minute and said: "That gives me an idea. *"Sprechen Sie Deutsch?"*

A little, I told him, but he was thinking again.

"I got it! How about baseball slang? Bet they ain't on to that yet!"

It was a flash of genius.

"Nor any other kind," I said.

"I got you, kid," he said joyously. "Now we can whistle the patter and they can flop their listeners all they've a mind to. Got a toad-sticker?"

"Just a hint," I said.

"Lend you mine. Here's the play: When the family quarrel starts, I bing his nibs and put him on ice. You two circle the bases while I crown the umpire,

or, 'hold 'em, Yale.' Let joy be unrefined. You slice the hand-cuffs. Stuff's tough and rough, but it'll slough." (This was delivered so fast that I did not catch it for a second.) "You streak it for the synthol-buggy and slide for the—the hot corner."

"It won't be a party without your cheering presence," I said, doing my best to keep up, but feeling rather slow.

"Never you fret. Uncle'll be there with bells on, when the sweet chariot swings low. Don't flinch, don't foul, and hit the line hard!" He said this last so cheerfully that we actually laughed out loud.

"You must anticipate the joyous event," I said.

"Uncle was afraid he'd never get an in-vite to another party, and oh, baby, what a swell one we're goin' to have! 'Nuther thing. I want to flop my humble pallet of straw in here tonight. So far I've been able to do the Jimmy Valentine on these dials here, but I ain't at all certain Uncle's goin' to get invited to the party. And I wouldn't miss the fun for anything!"

All this, you understand, came with such speed that it taxed me to understand.

"Chicken's safe in the stew unless the District Attorney does his stuff between now and then," he added. "I gotta hunch the D.A.'s about the only one who puts the defendants on the grid as a part of his daily chore."

He dragged in his cot, and we sat talking of everything except the task in hand, until my watch warned me it was 12 o'clock. Then Johnson "doused the glim" as he put it, by dropping his ranger's cap on the ever-glowing bulb, and we lay down, fully clothed. Just before we did so, he handed me a heavy wood-knife, casually. I thrust it into my shirt. I felt unbelievably cheerful after his descriptive nonsense, but could not sleep. Mary's hand, stretched from her cot, rested in mine, and soon her regular breathing told me she was asleep. Finally I dozed. Awakening, I glanced at my watch, which said eight o'clock.

Mary was watching my face, her eyes big and deep. I put my finger to my lips and swung up. Johnson was asleep on his cot at the other side of the room, breathing calmly as a child, and with a half-smile on his lips. Mary slipped noiselessly out of her blankets and began preparing breakfast. The ranger came awake all at once, like a cat, and lay watching for a minute. Then he smiled.

"Fix plenty, miss," he said. "It's the day of the big game, unless they pass out rain checks. Wish't we had a Babe Ruth on our team——" referring to that almost legendary hero whose exploits have served as a spur to aspirants to a place in the national game since its beginnings in the dim dawn of America. I once heard a Russian school boy squeal 'Do a Babe Ruth at him.' in a game in the Caucasus Mountains.

We kept our minds resolutely occupied with chatter about everything on earth, but every now and then we would fall silent, thinking with an urgency beyond our control of the issues of the day. I don't believe any of us had any other idea than that we were presently to die. Johnson was always the first to break in on the silence with some waggery, which made us smile, in spite of ourselves.

I don't believe breakfast was over two minutes when the warning signal clicked in our heads, bidding us to return to the inquisition room. I started up. Johnson glanced at me questioningly.

"They want us," I said.

"Funny, Uncle didn't get an in-vite!" he laughed. "Uncle's goin' to the party anyway, the old meanies."

As Mary and I paced down the now-familiar dim corridor, he kept resolutely so close to us that no bar could have been dropped to his progress without also barring us. When we came to the inquisition chamber, surely enough only two of the suits were laid out. He muttered something under his breath. "Here, you kid," he whispered, "slip the sticker."

I withdrew the knife and handed it to him with a motion I sought to make as quick and inconspicuous as possible. With a similar motion, it disappeared somewhere within his clothing. His left arm was gripped close to his side. "The gun!" I thought, before I could control myself. All the time I had been in dread lest some of the Enemy had quietly probed our minds while we lay unconscious the night before, and I cursed myself for the unguarded thought. But no panel lighted up and no inquisitor appeared. Quickly Mary and I assumed our suits, and started back down the corridor toward the "big room" as Johnson called it. He kept between us. As we started, I realized how mechanically we were already beginning to anticipate our Enemy's commands, and with a new dread of the possibilities of this enslavement—we might become drugged automatons subject at all times to their stronger wills, within a very brief period—we continued on our way.

CHAPTER XVI

The Fight for Freedom

IT was only as the door of the great chamber grated open and the strong wind urged us forward that I realized that the air within was thin, as if at 30,000 feet altitude, and as chill as death. I glanced at Johnson with misgiving. Unprotected as he was, how could he stand it? He was gulping in a big breath of air. Then the wind urged us forward and we were standing within the great chamber, which was ominously quiet and dark. It was quiet within my suit, at any rate. Then the big panel to the right slowly lighted up and there sat the Commander-in-Chief of the forces of evil, with his staff around him. I felt so strong a surge of hate and defiance, that it seemed to me he must feel it, too. Before us, as our eyes grew accustomed to the dim light, stood an ordinary broadcasting microphone. I dared not glance around. I waited with nerves on edge for I knew not what. Suppose Johnson had already shrivelled into death behind us! A booming command began to resound within my head.

"You will broadcast to Washington——"

There was a thin snap behind me, as of a twig breaking, and I saw with sudden amazement, that in the panel directly before the Commander, a star had suddenly appeared. Two more thin crackles and similar stars appeared before his aides to the right and left. The command had snapped off.

Suddenly I felt such overwhelming jubilance as I had never felt before——Freedom! I wanted to jump up and down and yell. As easy as that! But I felt my life-line seized from behind. Another star had appeared in the panel, well to the left. I was being yanked back toward the door. I glanced over my shoulder. As the door was rustling open I looked for Mary. She was already disappearing within it. I bounded after. I could sense Johnson at my left and could hear him gasp, even through my helmet. Then I caught up to Mary and we ran for a few seconds side by side.

Suddenly a great gust of wind met us. We staggered against it. I looked back for Johnson. He was right behind us, drawing in with open mouth and ecstatic countenance great breaths of the sweet air. I motioned to him to cut our lines. He motioned me on. Quickly we were at the inquisition chamber. Its door stood

open, too. Then he slashed vigorously down my back. Another slash and another, and I shrugged off the suit. He was already freeing Mary. As the helmet slipped off, I heard a hum behind us, mingled with squeaky sounds. I, too, drew in huge breaths of cold sweet air, free from that taint we had breathed ever since we had been in the mountain.

Mary stamped free. Johnson seized us by the arm. "Run like hell," he said. We ran again, or tried to, as he guided us down a corridor to our right. We had to battle against the rising wind, which was now shrieking through the mountain in a near-hurricane. Whirls of snow came with it. Soon we were toiling along with our heads down, and our exposed skin rapidly growing numb. We could barely see. But still above the wind sounded the rising clamor within the mountain.

We entered a door and stopped short, while our confused minds attempted to comprehend what we saw. It was a huge place dazzling with the rays of sun-lamps, in contrast to the darkness we had left. Ranged before us were row upon row of what looked like pigeon-holes in a desk, each with a fat, feebly wriggling white grub within it. Small dark shapes were hurrying at us from several directions, each carrying threateningly one of the tiny guns or blasters which Dr. Aurelius had described. There was a crashing explosion close to my ear. They stopped for a second and Johnson hauled us back out of the door.

"Tryin' to buck the wind," he explained, in gasps. "Got into nursery. Took—wrong—turn!" He urged us to the left. Suddenly I became aware he had stopped. Glancing over my shoulder I saw him stoop and pour out something on the ground. Then he struck a match, holding it carefully within his cupped hands. Instantly the whole corridor was filled with writhing flames. "Gasoline," he grunted as he caught up. "Guess that'll hold 'em a while."

It seemed only a second later that we caught the indubitable and inexpressibly desired gleam of daylight—true daylight!—ahead of us. It brought a fresh surge of strength to my limbs. With Mary within my left arm, we fought against the wind. It was decreasing now, and with each step we won fresh hope and joy gave us new strength.

I became aware that Johnson was chanting close to my ear.

"Nebuchadnezzar, he smole a smile."—a pause for breath.

" 'Guess that'll hol' 'em,' he sez, 'a while.' "

We were only half a dozen steps from the door when we heard a premonitory rumble within the walls. Frantically we struggled toward the entrance. Slowly one side began to move, to creep out, to close the gap. I gained it, thrust Mary through and was myself shoved from behind, feeling it brush my sleeve as I did so. The sun struck my eyes sharply and for a second I could see nothing, but staggered down the slope blindly. When I could see, there stood our 'plane as we had left it, seemingly unharmed. Mary was ahead of me. I ran a dozen steps after her and then glanced back.

CHAPTER XVII

Death of a Brave Man

JOHNSON was lying in a queer attitude at the door. I looked back again, and my heart stood still. Closing, it had nipped him about the legs as he hurled himself forward, and he was lying with his feet trapped in the stone. I cast an agonized glance ahead. Mary was nearly at the plane. Never was a longer second. My whole being shrieked to be away, away from that peril which was still as present at my back as a mad man with a knife. I turned—no credit to me—and ran back. Johnson's face was curiously serene. He waved me back, and called something peremptorily.

I still ran toward him. He was not looking at me at all. The hand with the gun lay on the snow. One wide glance he cast around the snow-rimmed valley, at the tops of the pines below, and lastly at the glorious sun. Then the hand with the gun came up, pointed at his head, and even as I shouted in horror, I heard its heavy report. I turned instantly and ran toward the plane. There was no more I could do. Never had a brave man died more bravely. And I recalled his last wish that he might see the sun again, made in so light a tone the night before, and I swore between clenched teeth that the world should know how a brave man died.

Mary was working quickly and expertly at the controls as I leaped into the cabin and slammed the door behind me. A second later I heard the glorious purr of the motor. She glanced at me, a question in her gaze.

"Dead!" I said bluntly. Then I seized the controls and put the plane into a vertical lift. A swoop and it had turned from that cursed cliff, and we were climbing the air at ever increasing speed.

For a minute my mind was occupied with steering; then the realization of our still-deadly danger flashed back. I seized Mary within my arm, and we sat there waiting—waiting for we knew not what, save that our spines crawled as if we sensed a knife at our backs. Faster and faster fled the glorious plane. In a minute I glanced down and saw beneath us the spot where the gun had gone over, so many months before, it seemed. I breathed more freely as still another minute passed and I calculated we might be beyond the reach of their death-ray. Minute after minute passed and still we fled, unhindered. Then, without warning, the motor stopped. I worked frantically to revive it, but to no avail. I quickly put it into a long glide, still headed toward safety, and when we finally touched the snow in a little open break in the trees, we were still another ten miles further away. I hastily calculated. We had gone at least fifty miles. My mind seemed numb. Mechanically I stepped out in the snow. We looked over the motor thoroughly. Nothing seemed wrong, but it wouldn't start. No spark, no response of any kind. With a shock I remembered the enemy's power to suspend electrical energy.

It could not have been fifteen more minutes before I felt a sort of premonitory grumble and heave, under our feet as it seemed. With not a doubt in the world that it was the end, I took Mary in my arms and we stood close, waiting, waiting, while she turned her weary face up to me and smiled into my eyes again as she had while we were being pulled toward the mountain. The seconds passed slowly. Then, without warning, a blast of wind struck us. I glanced back toward Seldon, and saw, in amazement, a huge dark cloud mounting swiftly higher and higher over the tops of the hills directly in the way. Then the full shock hit us. We were both thrown to the ground, and cowered there amazedly while the earth itself rocked under our feet and the heavens responded with tremendous thunder.

CHAPTER XVIII

Yamakite

THE glimpse which Mary and I had had of the President's conference with Aurelius and Dr. Yamaki was the second these three men had conducted. The wildest rumors were afloat. The news-

papers shrieked with headlines. Nothing had happened that the world was aware of since the Chicago massacre, but that tremendous catastrophe and the President's death had stirred the whole world as nothing had since Armistice Day, 1957, when the world's last great conflict came to a bloody and exhausted close. New editions came out every hour. Just enough was contained in them to stir the people's apprehensions to the deepest, and the silent, white-faced crowds grew thicker every hour along the streets surrounding the White House. Our easy generation was faced with something horrible and unknown. It is to our credit that no act of violence occurred. The calm youngster in the White House issued a calming proclamation, with which the country and the world had to be content, while he wrestled with the terrible problem of saving the world in three days, and the lines in his face and his gray hair today testify to his burden, although he is not yet forty-five.

Dr. Aurelius had sent for Yamaki the day of the cabinet meeting, and Yamaki, taking the fastest plane on the Pacific Coast, had arrived next morning, to be taken secretly to the White House to meet the President and Dr. Aurelius.

Their minds were so overwhelmed with the weight of the problem that I fear they may not have prepared him sufficiently to meet the situation.

"What! You bring me all the way from San Francisco and cause me to drop a very important problem, only to fight bugs!" he said, his voice rising to a hiss on the last word.

So their first task was to convince him of the seriousness of the situation. "You know me, Dr. Yamaki, and you will believe me," said Dr. Aurelius quietly. "This is not a question of fighting bugs. It is a question of saving the world, and I have summoned you because you have the best brain in the world, of the kind we need." Finally convinced, Yamaki sat for some time thinking.

"I think, if these creatures, they know English, we should speak in Japanese?" he said with a smile.

They assented with an alacrity which seemed to go far to convince him of the possibility of espionage.

Then, proceeding in that language, he said:

"Very simple. Load one of your biggest planes with Yamakite and drop him on this mountain."

"Yamakite! What is it?"

"You do not know it. No one in the world knows it. We shall never explode the atom—my researches have told me that. But Yamakite is the next thing to it. One ton of it, exploded against the side of Mt. Seldon, will smash those insects into fine powder, so!" and he snapped his fingers. "And it will give you a fine new volcano to be an added attraction for your Wymont National Park. Black powder, dynamite, TNT, Kratakit, synoblast—Yamakite! That is the order of increasing power, and it is geometrical. I made myself a pinch for experiment, and blew down a hill with it. 'Never again,' I said to me. 'Too much danger to the world that Yamaki will become very small, fine powder.'"

"Yes, but how long will it take you?" asked the President anxiously.

He thought a minute.

"Give me twelve hours, and two or three of your fine fellows at Standards. Say, Smith and Kahn and Graves. The materials are simple. At the end of twelve hours we will have a ton of it for you. That would blow down half the Rockies were it properly placed, and I will swear it will smash Mt. Seldon plenty, even if it is only thrown against his side."

The President and Dr. Aurelius snatched him up. They arranged that a heavy plane should fly with the selected crew and the stipulated materials to Mt. Weather, Virginia, some fifty miles from Washington. Dr. Yamaki quickly wrote out his list of materials, and handed them to Dr. Aurelius, who glanced them through quickly and noted with relief that they could all be obtained from the supplies of his own Bureau or those of the Bureau of Standards.

Then they waited. It was an agonizing wait, made more agonizing by the fact that Mary and myself had not returned, or radi-phoned any word. Dr. Aurelius quickly found out that Mary had gone with me, and that my Bureau chief had sent me to Mt. Seldon. "For years, Robert," he told me, "I haven't cussed a man out as I did him. Not since I coached football for Pittsburgh U. And I vowed to give you a hiding, too, but I guess we'll forget it."

Yamaki called him and the President, he related, and told them to meet him in the President's office at 10 A. M. the day before the ultimatum expired. And it was that conference which Mary and I had so amazingly looked in on. Yamaki had reported that the Yamakite was prepared, and he suggested that a heavy plane fly west with it, the pilot to align on Mt. Seldon a hundred miles away, and drop overboard with his 'chute. To go any nearer would be dangerous, he said. They agreed that the assignment should be given to "Buck" Bryant, the world patrol's most famous American flyer, who was at Baltimore visiting his family. The President was insistent that Bryant should time himself so that the 'plane would drop on Mt. Seldon a few minutes after the ultimatum expired, and not before. And he held to this point. The plane was to start from Mt. Weather, fly as high as the pilot could force it and smash into the mountain at as high a speed as Bryant could summon. Yamaki installed an electric connection between a plunger at the nose of the plane, and a charge of TNT buried in the deadly cargo, to explode it. This for precaution only, as he was confident that the plane's impact against the mountain would do the trick.

AT the last moment Yamaki had installed an audi-vision caster at the back of the cabin, so they might follow it and see if anything went wrong.

So matters stood when they left the conference. But Dr. Aurelius was called to the radi-phone before he left the White House.

"I'll never forget it," he said. "There was a blur of a voice on the phone, and at last it came clear.

"'I'm Henry Sparks, of Hudson, Michigan, Doctor,' it said. 'Listening on the emergency wave fifteen minutes ago, I caught the following message, which I took down in writing immediately afterward: "Robert Burns, speaking from inside Mt. Seldon." Can that be right?'

"Yes, yes, go ahead!"

"'All persons hearing this message will communicate at once with Dr. Henry Aurelius, Washington, and tell him he is being watched from the big chandelier—" then it broke off.'

"The big chandelier was easy enough—the chandelier in the President's room. I got that even while I was still standing there, rather shell-shocked. Mary is all I had in the world, you know, and I knew she was with you, and even if she weren't, I knew it would just about mean her death if anything happened to you.

"After thinking for some minutes"—thus briefly he dismissed a mental struggle, the frightfulness of which I could appreciate fully, and I honored him for it—"I returned to the President and told him only I had heard that we had been watched from the chandelier. His face whitened. He snapped out an order and half a dozen secret-service men sped for the house staff, and had the chandelier down within five minutes, by the way.

"Then he turned to me.

" 'Where did you get this, Aurelius?' he snapped.

"I tried to fence, but I must respect the quickness and clarity of his mind. He had heard, too, from me, that you and Mary were missing, so he quickly got the truth. We had moved out into the White House grounds.

" 'Do you suppose the enemy knows Japanese?' he asked.

"I hardly thought so, thinking it probable they had confined themselves to the language of the country in which they had landed, and pointing out that English had become so nearly the universal language that they might not have become aware there were other means of communication.

"Then his face changed. 'Good Heavens, man!' he said. 'That means your daughter and young Born will be blown up!'

" 'I'm afraid so,' I returned, 'but nothing must be allowed to interfere with our plans. They stand a very small chance of succeeding, I am afraid, at best, and my girl and boy are but two against two billions. We must go on with it, sir.' "

Dr. Aurelius stopped there, but I heard the rest of the story a few weeks later, when he, growling and shame-faced, was made the recipient of the President's personal medal for extreme sacrifice—our highest honor—and the President himself told a joy-filled world of the sacrifice Dr. Aurelius had prepared to make, over a world-wide audi-visor broadcast. But Dr. Aurelius' haggard gaze told me of the anguish those few hours had cost him. He will be away from Mary as little as he can, and I have often seen him sitting with the chubby hand of Henry Aurelius Born in his own, gazing at the baby with tenderness with which is mingled inexpressible sadness.

After a search of nearly four hours, the audi-visor in the chandelier was found. Its brilliant end, no bigger than a pencil point, was cleverly worked into the brass of the chandelier, and the whole instrument, hardly an inch long, was within the hollow brass. Yet it was more perfect than any earthly audi-visor I have ever seen.

I gathered that Dr. Aurelius had spoken with such firmness that the President, after thinking silently a moment or two, had not tried to dissuade him. It would have been useless—and what, indeed, were two against two billion? We would have been prepared, Mary and I.

But the hours dragged with terrible slowness until a tiny buzzer sounded within the White House basement, in a small room selected for its safety, and Dr. Aurelius and the President and Yamaki and McNab gathered there. Before them appeared the interior of the cabin of the heavy plane, and the motor's roar and the motion of the cabin told them that it was already in motion. Bryant cast one glance at the audi-visor and waved his hand, looking, it seemed, directly into their faces, and then bent to his work. His heavy, calm face was concentrated on the dials. A skilled radio man from the staff of the White House tuned the instrument as the plane moved out of focus, so that there was never more than a barely perceptible fading.

The slow hours dragged on again. Bryant had started at midnight, since it would take the heavy old plane nearly twelve hours to make the distance at the height he intended to fly. They sipped coffee, talked, but one or the other was always looking at the lighted instrument board, obscured momentarily by the pilot's body, or listening with an anxious ear to the smooth roar of the motor. No. X211-A had been selected for her well-tried air-worthiness. She had been the first plane to make the 'round-the-world flight without stops, and her stout metal had been tried by other flights. The pilot was worthy of her, and of all we can do for his memory.

Dawn came and then full day. But the cabin was still dark. The sun had not yet caught up with her smooth flight, now over the Dakota flat-lands. Finally the cabin lightened. Dr. Aurelius glanced at his watch. It was 9 A. M., Washington time. He had tried to put the thought of myself and Mary out of his head, he told me once in a moment of confidence, but his was a double agony. I am sure no condemned man ever faced the lethal gas or the electric chair, in the old days of legal execution, with more dread than he faced the success of this desperate stroke which meant freedom and happiness for the world's billions, or their slavery and ultimate extinction.

At 11 o'clock Washington time it became apparent the pilot was idling his motor. He glanced at the audi-visor and spoke three words. "Just too early." At 11:30 the listeners noted a change in the motor's roar. It slowed and became irregular, while Bryant worked frantically with his controls. Then he seemed to glance ahead. The motor stopped. There was dead silence in the little room, in which the five men present could hear the beating of their own hearts. As the hours wore on, the illusion had grown upon them that they were present in the cabin of the plane. McNab's hands twitched and he started forward as if to give his advice—that of a skilled pilot—to the man at the controls. Then he stopped, with an apologetic glance at the President, but the latter hadn't noticed him, being too concentrated on the drama within the cabin.

BRYANT tried every lever and stud quickly. But the seconds went by and the heartening roar did not begin again.

Then he glanced into the audi-visor again, his face as calm as ever.

"Mr. President, I'm trustin' you to say goodby to my family for me," he said. There was no tremble in his tones.

"I can glide her down and hit the mountain, but I can't trust her to herself. And I'm goin' to."

The President started forward.

"No, no, Bryant!" he cried, forgetful that 3,000 miles of space lay between him and the man addressed. "We'll take the chance, man! We'll take the chance!" His face worked, and he reached for the man in the cabin. Then he caught himself, and stood back.

And they stood silent, with their hands clenched so tightly that the nails pierced the palms, watching him drive on to his death. Every second seemed an hour. Then the screen snapped into blankness. It was the promised paralysis of electrical impulses. A fore-touch of it had killed the motor, apparently, and in attempting to drive down my plane the dazed inhabitants of the mountain had thrown down a blanket which covered the whole country, except a tip of Florida.

Everywhere wheels stopped, motors ceased, lights went out. Water pressure died away in the very pipes from which people were drinking. Vast crowds rushed from their houses and stood awe-stricken in the streets. Outside my house in Washington, so my landlady told me, a tall old man with a white beard and blazing eyes appeared suddenly, as if from nowhere, and began to preach that the world was ending.

His fierce tones penetrated into the house, and she came out to find everyone rushing into the street. "And, Mr. Roberts, I came near believin' him when I found the electricity had quit!" she said. In Los Angeles panic began within five minutes, and the streets were crowded with people on foot fleeing toward the mountains, to be met by other hordes rushing to the city. The pulse of the nation ceased. Autos stopped, their amazed owners pulling them to the curb. A million

planes, a second before busy about the world's commerce and transport, plunged toward Earth, while their surprised pilots fought with the controls. The elevators went dead, and people in our great skyscrapers, remembering Chicago, fought down narrow stairways in wild terror. Surgeons in hospitals found themselves in darkness in the midst of tremendous operations. The mighty Force upon which the life of the whole world had come to depend lay stupefied and quiet. The death-toll from that brief paralysis has never been fully reckoned, but the best estimate is that it was fully 100,000.

A distinguished electrician once said that a few minutes' failure of power in a large modern city would be as bad as an earthquake. Well, the power failed, and the earthquake was yet to come. For it took some hours for the vast impulses started by the Mt. Seldon explosion and the resulting volcanic activities to reach the cities. And it was the mightiest quake of modern times. The whole Earth, or our side of it, groaned and shivered in agony as that immense wound was riven in her side. But it was a life-giving operation.

CHAPTER XIX

Aftermath

MARY and I watched the mounting black tumult in the sky for a minute. But we had absorbed too many sensations for a new one to register fully. Almost mechanically I turned to our helpless plane and touched the controls. Why, I was never able to determine, for I was, I believe, only half-conscious. And the motor gave a glorious purr!

That simple but unbelievably joyous sound galvanized us into new life. Mary stumbled into the cabin. I followed. With her anxious gaze upon me, I pulled a lever, and the plane responded. I put her into a vertical climb, and we fled as from the wrath of God, with that black menace mounting higher and higher behind us. But the volcano-wind was quicker than we. We had been in the air scarcely a minute when the plane was seized, as in the clutch of a giant hand, tossed and buffeted and smashed from one side and the other. It required all my strength and quickness to keep her going. But in a second I got it fairly on our tail, and we fled down the wind as if possessed. I spared a glance at the speed-dial and it registered five hundred, then six hundred, then it crept up and beyond the seven hundred mark. We stopped nowhere, and in four weary hours we saw the red of the Washington cloud-breaker standing up like a signal of safety, a beacon of victory. The evening there was still clear.

In every city, as we passed we saw dancing in the streets, and once, as we flew over Indianapolis, we could faintly hear the stentor tones of a city-wide announcer broadcasting something. Now, as we slowed down to descend on the roof of the *News* building, still unaware of exactly what it all meant, I turned to Mary with a foolish grin:

"God reigns and the Government at Washington still lives!" I said out of some forgotten history-lesson. She flung her arms around me between laughing and crying. I brought the plane to the roof.

The excitement, which had given us strength, had died, and we found ourselves barely able to walk to the roof-elevator. Old Mike, the elevator man, recognized me with a start of amazement.

"Glory be, Mr. Born, they said you were dead!" he cried.

"Darn near it, Mike," I answered as he wrung my hand. He shot us down to the news-room. We stumbled out wearily. I saw the Chief stare at me and pass his hand across his eyes. Then he too exclaimed. The next second we were the center of a shouting, swirling crowd.

Then the Chief dragged me toward a typewriter. "Write it, boy, write it!" he commanded. "Biggest story in the world's history!"

I looked at Mary and she quietly signed to me with her hand, then went to a 'phone and pressed the studs. She told me later she caught her father still at the White House, and as his dazed and unbelieving tones came over the wire, she found herself quietly reassuring him, almost afraid for his reason.

I couldn't write. But I found I could still talk, and I poured out to the Chief, a willing amanuensis, the story which appeared in every newspaper of the planet the next morning. His flying fingers took it down and a crew of volunteer copy-boys rushed it to "Dolly."

CHAPTER XX

The World Making Ready

I DID glance up, ten minutes later, to see a tall man rush into the room, gaze around and enfold Mary in a fierce hug. Then, still embraced, they came over to me, and his long arm picked me out of the chair and included me in that tremendous hug.

Of course, the enemy General Headquarters was destroyed. And the tremendous smash of the explosion apparently deadened the brains of those of the Enemy left alive, in far-flung scout stations, minor power-posts, and the like, connected in some impervious way with Mt. Seldon. I suupose we shall never know how many there were. They fluttered out of the air in their tiny planes for days, seeming utterly helpless, and submitted quietly to capture, apparently not knowing, or caring, what it was all about. Nests of them were found in every city, and blasters were discovered ready for use in New York, Montreal, San Francisco, Los Angeles—indeed, in almost every one of our large cities.

Of course, all mountain-ranges of the world were searched at once, with the most delicate instruments we have. But no more of the Enemy were found. In their intellectual arrogance, they appear to have fatally under-rated us, and to have staked everything on that one throw of the dice. We do not know why. Perhaps some urgence beyond our possibility of knowing, from that cold and deadening planet 30,000,000 miles distant in space, forced them on. Perhaps, indeed, Ron was only a will-less automaton, carrying commands from home, from some mighty super-brain, impatient with the slowness with which he was preparing against these so-inferior animals. We shall never know.

Only one human being was found alive who was within 20 miles of Mt. Seldon when the Yamakite exploded against it—Robert Rand, a ranger. He was a dazed half-idiot for days. His clothing was torn completely off when an exploring party found him three days after the explosion. Graphic, indeed, is his relation of how the bulk of the mountain seemed to stand up before his astonished eyes, and how the first blast threw him to the ground, and then destruction itself rained around him, while the earth shivered and cracked, and a huge gorge swallowed the cabin from which he had emerged. For hours it rained stones, he said.

And all the world knows how short and cold our summers have been, and how long and cold our winters, since that blanket of volcanic ash was flung into the air. For almost the next year we scarcely saw the sun. It was like the bad old semi-civilized days, when we still burned our coal in our cities. The explosion of Krakatoa, 150 years ago, was minor compared to

this! And that red and glowing wound in the Earth's side attracts many thousands each year, who stare in awe at its smoke by day and its pillar of fire by night. But Mary and I have never been back.

We have lost, immeasurably, in peace and safety and comfort. But I cannot help thinking that we have gained something. A softened race is hard again. The whole world is in training, is being tempered for the furnace of War. And if War does not come, our reawakened energies and our new discipline promise to put us ahead much faster than we would have gone without its urgence.

Dr. Aurelius, Yamaki, Crane, Kuhn, Mathewson and a hundred more are devoting their whole time to studying our late antagonists, and attempting to discover their secrets. Of course, none are alive. The world destroyed them in self-protection. We have discovered how they reversed their planes in mid-flight, and I am prepared to hear before I die—or to announce, because I expect to write the story—the discovery of the secret of their anti-gravity material. Their supersonic waves, of course, were based upon principles known to us, and their high-frequency annihilator is based upon discoveries made as long ago as Dr. Coolidge, or more than a century. Of course, they were much ahead of us in their application.

Of the vexed question of the biological genesis of the Enemy, I do not feel at liberty to write, since the controversy is still at its height and shows no symptoms of subsiding. Dr. Aurelius leads a school which insists that the resemblance to our ants must be based on something more than coincidence. One daring speculator—Christy—has written a monograph in which he maintains that our earthly ants are of the same race, and that the most likely theory is that they invaded our earth millions of years ago, and have degenerated until they possess only the marvelous cohesion and social control of the invaders, without their size or intelligence. The other school insists that the similarity is simply proof that life is bound to develop along related lines. Go to Mars, they say, and you will learn that animals exist there or once existed, which, by some quirk of evolution, might have become the ruling race, as did our warm-blooded race with its true lungs. Indeed, they insist that after the Earth shall have become too cold for us, some insect species may take it over.

Well: to leave this highly speculative subject, I need only add that the most baffling problem which yet confronts us is that of their power to muffle the transmisson of electrical energy. No slightest hint of how this was accomplished has been found, although some of our mathematicians have worked out formulae seeming to indicate that a slight extra-dimensional twist might have been given to the current with relatively slight means, so that it might have wandered off, as it were, and become lost out of our confining lives.

Our young men are trained and hard, our young women eager and alive. Perhaps, after all, frightful though the prospect is which may face the world at its worst, we still have gained. A race with an object, particularly when that object is survival, is a race which grows, and which will continue to grow, until we can defy the vast forces, the superhuman cunning of all the powers of space, to set foot on our own corner of the universe — our dear and comfortable earth! Ours since the beginning of time, and by Heaven! it shall be ours until

THE END.

Through Intervening Space

Through intervening space we brought
A gift from you, ah! happy thought;
Star-dust! a gift from the Milky Way,
Star-dust from billions of miles away.

We will present you, Milky Way,
With a silvery rocket another day,
Emblazoned across its face in gold,
"Part of your secrets you have told."

While it is traveling through the grit
That part of space that you have lit,
With your secrets do it ply,
And speed it on to another sky.

Spray it well with diamond bore,
Stipple it well with plant-life spore;
So let them know that You and I,
Are much the same in a different sky.

W. T. B.

Cosmic Menace

By A. W. Bernal

HERE is a "different" story. The earth is tight in the grips of a menace never before heard of—something which cannot be fought off or conquered by the best weapons of defense obtainable. There seems no choice between the two alternatives given the human race. What is there to be done? Our new author gives us a story of striking originality, unusually interesting and quite plausible in its scientific aspects. We welcome our new author.

Illustration by MOREY

IN the Venerian quarters of the Universal Astronomical News System station on the planet Capjadista, a lone figure strode impatiently back and forth.

From time to time the solitary Venerian paused to peer momentarily at the long glowing wall before him. This entire space was overspread by a televisor screen on which was reproduced a section of the heavens. But only a few faint glimmers denoted stars while fully three-fourths of the screen was a gray blankness.

Suddenly the furry Universarian dashed again to the great wall-length televisor plate, stared fascinatedly for a long instant, then sprang to a powerful communicator set standing solidly in a corner. Soon the anxious face of a Terrestrian U.A.N.S. man appeared in the glass panel of the set and the catlike Venerian bent close to hoarsely shout: *"The Dust is here!"*

Without another word the gaunt Universarian sprang noiselessly across the cement-floored room toward a small door at its far end. As he pressed the button which slid this door silently open, he stood tense in listening attitude. Horror-filled eyes sought the polished metal ceiling. A rainlike pattering from above warned him that he was not a moment too soon. Like a shot the Venerian thrust his furry body through the opening and, even before the door closed, was working frantically at a many-levered control-board.

In a flash, a portion of the Venerian building seemed to detach itself and hurtle skyward, where it hovered for the merest fraction of a second. The frightened occupant of the tiny cube threw one last look at the desolate, ice-covered scene below, then pressed sharply on a row of studs at his finger-tips. The one-man space cube screamed through the dense atmosphere out toward a far-away, marble-sized disc of dully glowing orange.

The Venerian inside was murmuring half-aloud: "Pluto, Neptune, Uranus, Saturn, Jupiter, the asteroids —then civilization!" He gnawed nervously at his fingers.

Scarcely had an hour elapsed after the first Terrestrian operator received the fearful warning: *"The Dust is here!"* before the news was being broadcast to the alarmed population of three worlds. The Dust was here! No longer was it slowly creeping across the void, blotting out the stars, threatening but distant. No longer was it a doubtful, almost incomprehensible menace, but it had suddenly become an actual, imminent danger! *The Universe was doomed!*

Six years ago the first stars had vanished in inky blackness, had vanished as though erased from the blackboard of space by a mighty hand.

Then slowly, in the years that ensued, the tiny flecks of light, the distant suns and planets of other universes, faded away, leaving only a black emptiness where once they gleamed. Like a puddle of ink this doom poured over the stars, lapping up their luminescence, greedily.

At first, only astronomers of the three-world nation

Due to the vast speed of the hurtling orb that rain was far more fierce than that of the other sun-children. As Earth plunged through that awful blackness, the first pelting world-fragments tore savagely deep into the metal hemispheres.

of the solar system heeded the darkening firmament. It was discussed only as an interesting, if puzzling, occurrence in astronomical circles. But danger? How could such a distant phenomenon affect in the slightest the peoples of Mars, Earth, or Venus?

As the Darkness gradually drew ever nearer, Universarian scientists began to speculate anxiously as to what the cosmic disturbance really was. And they found out. The Darkness was a sea of dust! An ocean of minute particles of destroyed worlds—powdered remains of dead suns that had crashed in mighty collision. An ocean without end! Millions upon millions of miles of dust—fragments of meteors, crumbled planets, disintegrated satellites—in one measureless mass.

And it was moving! It was flowing through infinity, restless, ever-advancing. Dust! A cosmic destroyer! Its huge bulk inundating worlds, stars, universes, as an ocean of water pours over grains of sand. Dust!

From the time it was discovered that the sun and his ten children lay directly in the path of the Dust, dread clutched at the heart of every living Universarian. Countless wild plans and suggestions poured into the Universal Astronomical News System Headquarters on the three inhabited worlds. Millions of Martians, Terrestrians, and Venerians worked ceaselessly to find some feasible way of thwarting the doom which was slowly descending upon the solar system to wipe it out.

OUT of the whirl of plans and ideas, only one or two were even worth considering, and only one was finally made use of. Mars was entirely enclosed within a solid, strong neuvalactic roof. With all the cities of this world already shielded by hoods of the transparent metal as a protection against the sandstorms raging constantly over the face of the red planet, this task was not so stupendous as otherwise it might have been. Earth, too, was enveloping her cities within massive neuvalactic hemispheres as a primary precaution against the cosmic menace. The people of Venus, however, scorning such methods of protection as futile, were frantically striving to produce an anti-gravity screen, or some similar type of shield with which the ocean of dust might be repelled.

Meanwhile the flood of star-dust had drawn steadily closer, until now it was lapping at Capjadista, tenth and outermost planet of the solar system. Soon this sea of cosmic death would be rolling over all the planets, burying them for eternity in a deluge of dust! No wonder the teeming millions on the three inhabited worlds, crushed under a burden of fear, forgot all else and turned to their scientists with the faith in their hearts struggling to subdue the panic which had risen there. It seemed incredible. *Death to the Universe!*

How could this monstrous avalanche of interstellar death be diverted? Every citizen of twenty-nine continents was grappling with the unconquerable horror in a last effort to solve this problem.

Two months later the Dust had completely engulfed both Capjadista and Pluto, and was now licking hungrily at giant Neptune. All the mines, the U.A.N.S. stations, every single edifice on the two outermost planets were now rolling through waves of black star dust, in the maw of the unbelievable death.

Half a year later the relentless ocean had claimed great Jupiter. Uranus and Saturn were receding before the Dust, wheeling toward the other side of the sun. They were safe temporarily. Now, clutching fingers of the Dust played greedily among the whirling, jagged rocks that were the asteroids. The monstrous avalanche was creeping past the last boundary which separated it from the civilized spheres!

Red-eyed Mars seemed to cringe and cower as his path brought him near the devouring Blackness. Fully half the population of this ancient orb had careened through the void at top speed toward the temporary security of the more sunward planets. Venus, once almost entirely uninhabited, was struggling to accommodate a flood of refugees. Innumerable fear-stricken Martians tried to prolong their lives by settling on that moist, misty globe, so different from their own thin-aired, sun-baked Mars.

Even earth, now a great distance away and headed around in a curve behind the sun, was receiving hundreds of fliers daily. Great numbers of oddly assorted citizens of the triple-world nation were packing themselves into her neuvalactic-domed cities.

Those who relied faithfully upon metal-encircled Mar's ability to withstand the onslaught of the cosmic menace, were constantly in radio-communication with their less confident brethren sunward. The apprehensive millions on Earth and Venus listened in horror to the reports that the Dust was closing in on the sandy planet. Then one night the first rain of Dust beat derisively at roofed Mars.

For weeks the Dust buffeted about the doomed Martian world. Mightily his metal ceiling strained to ward off the horror from the stars, but to no avail. For two months the Dust seethed about the besieged world, and in that time the planet was coated with a heavy layer of world-fragments. Many miles in thickness and many tons in weight was this layer. The metal envelope, under the awful pressure of the Dust, had begun to sag, had bowed until at last it cracked! Vast rifts, mile-long fissures appeared. Then suddenly, with a space-rending crash, a huge jagged section of the covering gave way. A torrent of black star-dust surged in upon the helpless beings below. In an hour's time the entire face of the planet was deluged with tons of Dust! The life of every living thing on the globe had been snuffed out! Not a single person escaped!

And Venus was next to be inundated!

All those panic-stricken creatures on the face of that threatened world went mad. Appalled by the ghastly fate of Mars, shuddering, fear-demented thousands took to flight in their space-ships. But these fleeing multitudes were as sure of death as those who remained behind. For in leaving the solar system behind, the supplies of even the largest cruisers would be used up completely, and then these tiny man-created asteroids would drift eternally through space, unguided.

Meanwhile the merciless obliteration of Mars had brought home a terrible realization to earth. Her own metropolises, with their hemispherical shields, were as vulnerable as the metal roof of Mars had been. It was not to these transparent domes that earth could look for safety. Some other plan must be devised and that at once, if crowded earth was to avert the impending disaster.

The useless metallic bubble-roofs glinted mockingly down at the frantic humans below, who were racking their puny brains to evolve a means to escape annihilation.

But to be one of earth's packed millions was to be alive; even if only for a little while longer. As a consequence, immigrants flowed into earth's cities until the World President was forced to warn that any further approaching interstellar vessels would be destroyed the moment they came within sight of the Terrestrian Interstellar Navy.

In spite of this ultimatum the fugitives continued to stream toward the green planet, day and night without cessation. But true to the World President's word, earth's fleet destroyed them unmercifully.

It was hideous, that murdering of fellow beings,

but it was necessary. Not a single person more must be admitted to the thickly populated earth-cities. The slaughter prevented that.

A FEW weeks elapsed, then a warning Dust-rain upon cloud-blanketed Venus caused an immediate world-migration. Earth was the goal of this migration. Of course it meant war. That fact was realized as soon as the determined, onrushing mass of immigrants sighted the advance scouts of the Terrestrian Interstellar Navy. Yet on they came. Certain death lay behind; possible salvation lay ahead. On—on to battle! WAR! After more than nine hundred years of interplanetary peace, now intermingled races were to meet in unholy conflict. The last war of Universal History—a war of extinction!

Breed mattered not. It was Defender against Immigrant. Squat spongy Martians, stalwart, bronzed Earthmen, lithe, furry Venerians—all battled desperately against men of their own kind as well as those of alien race. Friend against friend, brother against brother, kind against kind!

Wave after wave of darting, rocketing Immigrants crashed against the solid wall of the Defenders, who were stationed a few hundred miles from earth. Untold swarms of ships on both sides flared to demolition. But from earth below and the void beyond rushed other frenzied thousands, eager for the fray. With terrific explosives, withering heat beams, blasting flash rays—with every destructive force known to Universarians, the two navies of space clashed in lethal strife. The blackness of space was shot through with dazzling beams of light and heat, issuing from and searing through the darting, dodging space-cruisers. Blinding flashes of destruction engulfed ship after ship. But not a sound penetrated the walls of the fliers. In the great vacuum, even when cruisers crashed head on, no sound was apparent to the occupants of the battleships nearby.

A life for a life, a ship for a ship! Time and again the massed Terrestrian fleet was attacked by the desperate Immigrants, but the defensive wall remained unpierced. Without respite, the refugees pitted their strength against the red-striped, blue vessels of their opponents—destroyed and were destroyed—until it became apparent that only the fleet with the greatest quantity of cruisers would emerge the victor. That fleet belonged to earth.

The fight raged on for hours more. When the standard cruisers of the Terrestrian Interstellar Navy gave out, great Terrestrian flags were attached to commercial ships and they were sent up. Often the regular war-boats beamed the volunteers unknowingly, for it was difficult to see the insignia that distinguished them from the Immigrants.

Now the battle raged needlessly. So many ships on both sides had been sent down in incandescent fragments that there was more than enough room for all survivors on earth below. Still they fought on. The battle-lust drove the earth fleet on until no longer did a single ship of the Immigrants remain intact. Then and not until then did the grim-faced militants yet alive return wearily homeward. There were no wounded in that war. There were only the living—and the dead.

The most terrible war in the history of the Universe was over. . . .

The World President quietly seated himself in the huge chair that faced the semicircle of blank viewplates on the wall before him. He nodded at a secretary who stood awaiting the signal at the master-switch of a big control-board. In a moment the many rows of glass paneling facing the World President glowed softly and on each of the squares appeared the image of a member of the Council. When all the squares were occupied, the World President spoke.

"Gentlemen," he addressed the assemblage, "you know why the Council is meeting today. Need I remind you that in less than seven months earth in her orbit will wheel straight into the Dust to her complete obliteration? We have been fortunate indeed. We are still almost diametrically opposite the cosmic deluge and shall not encounter it until we are on the other side of the sun.

"But, gentlemen, if we are to save earth from the Dust, we must do something at once. There is not a day to spare. I am afraid that unless one of you here today has a plan that is feasible, our planet is doomed."

The elderly world leader gazed despairingly at the Council while an uncomfortable silence was maintained. His shoulders sagged visibly. "Has no one a suggestion?"

Suddenly one of the members left his space on the screen, while muffled sounds broke the deathly stillness. The weary executive turned a querulous gaze toward the vacant square.

There was a jumble of flickering shadows, then the image of a bright-eyed, tousled-haired Martian appeared momentarily on the viewplate. "Mr. President!" he called beseechingly and vanished.

"I beg your pardon, Mr. President," apologized the original occupant of the glass rectangle, as he appeared once more. "The interruption was unavoidable. That fellow forced an entrance to my study and demanded to speak to you about a plan for saving earth. I real——"

"Terrestrian Truesdale Ling Fong, you may allow the man to have a few minutes of our time," the World President broke in. "We must not overlook a single chance for salvation," he added.

The Earthman spoken to stepped back out of focus, allowing the dishevelled Martian to take his place. The young man smiled gratefully at the World President and began.

"Mr. President," he said in the husky, vibrant tones always associated with one of his race, "perhaps I should first tell you who I am. My name is Tquerl Vraltu, Deket."

At this a low murmur ran swiftly around the Council Hall. Tquerl Vraltu—son of Jogv Tquerltu, greatest of Martian scientists! Deket—Martian title of distinction, conferred upon only ten living scientists! From that instant the youthful speaker had the absolutely undivided attention of every man present.

Tquerl Vraltu, Deket, rapidly led up to his subject by first pointing out the futility of trying to combat the Dust. Then, like a bombshell came his startling idea.

"And so, Mr. President," he was almost shouting now, "I am convinced that there is but one way to save earth—*force her from her orbit!*"

When he finished, the young scientist stared breathlessly at the silent faces on that part of the paneling visible to him. He was trembling with emotion. For a long minute the Council remained in silent thought, stunned at the boldness of the Martian's words.

"Will you be so good as to continue, sir?" asked the World President. "How can earth be forced from her orbit?"

For an hour Tquerl Vraltu, Deket, talked, unfolding his plan. With concise clearness he answered all questions propounded by the Council. At length the Council was dismissed.

Tquerl Vraltu's plan had been accepted. It was daring——

But it was a chance!

CEASELESS toiling held sway. From the neuvalactic domes of the artificially temperatured cities rang the echoes of a mighty laboring. Hour after hour, day after day, week after week, the swarms of earth slaved against time. Even before one shift had a chance to get fatigued it was replaced by another.

And so for five months the planet's myriads worked to make ready for the day when that last life-bearing world in the Universe should cut loose the sun's bonds and hurtle into infinity. A vagabond world!

Yet time was short. For now a thin streamer of the Dust veiled the sun's warm face. Unless escape was possible, soon—soon would the ocean of world-particles be upon earth herself.

But the untiring labors of earth's anxious people were drawing to a close. At each of the poles, shiny new machinery, housed in mile-square structures, waited for the signal to release earth from the gravitational shackles of the sun, while in the heart of what had once been the Brazilian jungles, the mouth of a vast chasm gaped widely. It led down almost through the planet's crust. Into this Titanic well was being poured tons of atomite. Atomite was a synthetic substance manufactured in the World Laboratories, for this very purpose. It contained tremendous energy and was easily broken down by electrolysis. The digging of this huge pit had nearly proved to be an insurmountable obstacle even for all the willing hands at the World President's command.

But somehow it had been completed and now everything was in readiness for the great test. Could this never-before-imagined project be accomplished? The fate of the solar system's only remaining inhabited globe hung precariously in the balance. Would the attempt succeed? Men prayed that it would. . . .

The World President stood ready at the hastily erected control-board. On it were three switches, two black and one white. With the eyes of the entire world upon him, through the Universal News Broadcast televisors, the aged Terrestrian spoke a few words of explanation into the ready microphones before him.

"People of the Universe," he began softly, "as you all know, we are about to try to jerk earth out of her orbit.

"Stationed at mathematically fixed points at each of the two poles are one hundred gigantic gyroscopes of a magnitude totally unthought of before this time. The starting of these ponderous gyroscopes is the first part of our experiment. But these two hundred stabilizers, powerful as they may be, cannot alone push earth away from the sun in time. The work of the gyroscopes, of course, is to straighten earth in her orbit, forcing her path around the sun to become an almost straight line heading her out into free space. This is the only way we can escape the Dust.

"But since this procedure cannot be brought about soon enough to save earth from demolition, we must secure aid from another source, too. Hence, a sudden releasing of a tremendous energy in the Brazilian Pit will serve as an additional impetus. This Titanic explosion of atomite, properly directed as it will be, will not only give earth a much faster rate of spin, thus naturally forcing her away from the sun, but will also act as a Gargantuan rocket, pushing our planet far out into the abyss of space.

"As you are well aware, this is a seemingly impossible feat; but we believe that these combined forces, acting simultaneously, will without doubt throw earth out of her orbit. Whether or not the terrific reaction of the explosion will shatter this planet to bits cannot be foretold. We can only pray that it will not."

While the World President stopped for breath and mopped at his perspiring forehead, the world kept an awed silence, tensely awaiting what was to follow. Then the voice of the world-leader again reached the remotest corners of the globe as he resumed.

"Naturally, these two hundred gyroscopes, weighing each many tons, cannot be stirred to instant activity. On the contrary, it will be nearly a week before they gain sufficient momentum to be of service. And it will not be until then that the contents of the Brazilian Pit will be discharged.

"Now I am about to start the stabilizers revolving by throwing these black-handled switches which you see here."

Amidst what seemed to be a universal gasp, the World President closed two of the switches on the control-board. In faraway buildings two hundred huge gyros began to turn, almost imperceptibly now, but in a day——. After a long moment the World President again turned to the microphones and spoke.

"Just a word of warning. The atomic charge in the Brazilian Pit exceeds in power anything ever before conceived of. At the proper instant the charge will be set off. Should anyone accidentally fire this Titanic cannon beforehand, earth, and all upon her, may be hurled to a flaming destruction into the sun. So be careful! Let no one approach the Pit." And, after asking the people of the world to return quietly to their work, the World President left the sending platform.

The Brazilian Pit was not molested. The people knew too well the force of the incalculable power contained therein. Atomic energy was not a thing to tamper with.

OVER a century ago Grersmo Klonpg-DNL, male Martian, had first succeeded in releasing the energy stored within the atom. In the wondrously complete laboratories upon Mars—Mars had ever been foremost in things scientific—had Grersmo Klonpg-DNL toiled with his seven hundred assistants toward the realization of his goal. But in the instant he made his dream a reality, he killed himself and thousands of others. The colossal power liberated so suddenly under the hands of the aged scientist blasted half the city of Vraejui-Volwyrd, the Martian capital, off the face of the planet. At the sight of the smoking, seared crater that had once been the heart of a city, the savants of three worlds unanimously agreed to investigate no more in the realm of the atom.

But now that resolve had been cast aside. Sheer necessity demanded the use of atomic energy in this stupendous undertaking. The engineers who designed the Pit hoped that most of the fearful energy would be directed harmlessly into space; but perhaps the blast might even tear the world apart! They could only hope that such a catastrophe would not occur.

The roar within the white, squat structures at each pole, which housed the stabilizers, was enough to burst the eardrums of any but the deafest of the tiny-eared Venerians. These men alone of the three races could brave that awful din to care for the many mechanisms so important to the salvation of earth.

Finally the gyros reached their highest speed. The day had come when the tons of atomite were to be discharged!

Once again the familiar figure of the World President stood on the sending platform of the Universal News Broadcast station. When all was ready, the elderly executive quietly made a short address. He rapidly told the listening masses of the terrible danger of the experiment about to be performed. He stressed the point that although everything that man could do had been done to insure the success of the great test, only God alone could tell whether or not earth was to be splintered to fragments, hurled into the sun, or snatched safely away from a cosmic doom.

"And now, people of earth," he concluded, "I shall close this switch in a very few seconds. No one can tell what will occur immediately after the charge of atomite is set off. The best thing for everyone to do is to remain quietly where he is now." He glanced hastily at his wrist watch. "Five seconds more. Ready?"

The people of earth, eyes glued in fascination upon the gleaming white handle of the switch, stirred not the fraction of an inch. The World President, his own eyes fixed steadily on his watch, grasped the switch-handle. His hand was without a tremor. He smiled reassuringly at the white-faced, unseen watchers, then closed the switch.

For what seemed eternity, nothing happened. Then the Universe turned upside down—commenced whirling dizzily about. Chaos!

Amid a crashing, blasting, space-rending roar of sound, earth rocked and staggered, while every neuvalactic city-covering groaned and quivered under the beat of mighty vibrations. A tremendous screaming gale tortured the surface of the reeling planet. If it hadn't been for the straining metal domes, the whining wind would have torn everything from its foundations and swept all away in a wild tumult of rolling thunder, blinding flashes of lightning and swirling seas of rain.

The results of the atomic blast in the regions around the Pit were frightful. Great fissures, angry chasms, yawned suddenly in earth's crust; the ground heaved and rolled; mountain ranges sank into black rifts, while valleys hurtled skyward to become thousand-foot peaks. And the Pit itself! The very core of the planet was laid bare. Floods of molten, almost gaseous metal and rock splashed in devilish whirlpools at the bottom of the Titanic hole that had been seared through the crust of the globe.

In general the cities of man fared well. True enough, hundreds of structures collapsed, and many neuvalactic domes split and crashed inward; but the thousands who perished were as nothing when compared to those who emerged unscathed from the holocaust. The living were grateful enough that earth managed to hold intact, leaving even some alive.

The transparent ceilings did great service. When the waters of the world left their age-old beds and poured over the continents in mile-high waves, surging heavily about the metal-enveloped metropolises, not more than three roofs collapsed.

Eventually it was over. Men breathed again. Earth —the planet that had spun around the sun for eons—*Earth!* was no longer chained to her parent. She was free! Free to rush through the void toward distant constellations! Free to escape forever that threatening ocean of death. Yet anger still lay ahead. All that which had just occurred was only the beginning.

In the days that followed (reckoned solely by chronometers now), earth careened through space, leaving the steadily dwindling sun far behind. A long streamer of atmosphere, like the tail of a comet, streamed backward in the wake of the planet. But man worried not on this score; he manufactured his own air inside his snug cities. Only an increasing coldness gave evidence of earth's rapid flight away from the sun.

The seething sea of blackness off to one side was speedily swinging across the firmament as if to head off the runaway world. Would earth, even after her superb attempt at escape, yet be caught in the toils of the dark horror? With fear stabbing numbingly at their hearts, the last living Universarians waited and wondered.

For a time the outcome of that ghastly race seemed uncertain. Then, when earth was abreast of the surging sea of world-fragments, the joyous savants announced that she would speed safely by. At the tremendous rate the planet was going, there was not the faintest chance of her becoming enmeshed by the cosmic doom. For the first time in months the people of earth were happy.

But in another day—a day without sun-light!—it was discovered that a huge arm of the ocean of star dust was sweeping toward earth from beyond in a vast, deadly arc! A million awful miles in length, it stretched directly across the path of the runaway!

HORROR, like an advance-guard of the Dust, deluged the shivering Universarians. A few days more and the fleeing sphere would crash headlong to her doom. If only that outflung arm of annihilation were of little thickness. But was it?

Soon a myriad flashes of fire high above the planet's surface showed that the first of the Dust was raining down upon a terror-stricken world. The frightful velocity of earth had caused the initial onslaught of world-particles to be ignited by friction! For several days more the black sky was sprinkled with a thousand tiny flares of flame and the doomed cities received a constant drizzle of microscopic cinders. But the protecting atmospheric envelope, the main part of which was strung out across the heavens behind, soon gave out. The flame-flashes were replaced by a barely audible but persistent tattoo upon the neuvalactic city-coverings. Helpless earth was at last at the mercy of the Dust!!

Due to the vast speed of the hurtling orb, that rain was far more fierce than that of the other sun-children. As earth plunged through that awful blackness, the first pelting world-fragments tore savagely deep into the metal hemispheres over the last cities in the Universe. However, a thick blanket of Dust soon lay heavy upon the surface of the runaway planet and the pitted domes were no longer reached by the Dust-rain.

In a very short time, the monstrous layer of Dust, which was constantly being added to, would crush the metal domes and flood the fear-crazed metropolises beneath in a torrent of death. The lives of the remnants of a once-mighty triple-world nation were soon to be snuffed out by the unconquerable doom from the stars.

In a hundred buried cities the neuvalactic roofs were commencing to sag. Messages of despair circulated about the globe. Earth contained naught but pallid-faced people now; doomed men awaiting death. Then, when the last vestige of hope was dead, there came startling news. The blanket of Dust was shifting! From every metal roof came a restless scraping and scratching. The abysmal darkness overhead seemed to be less oppressive. The ponderous layer of cosmic dust appeared to be thinning in many places. A new surge of hope thrilled over the world. Faith once more lighted the faces of the incredulous, soul-shaken millions. Eager eyes sought the ceilings high above.

It was true! The Dust was lessening! Earth had encountered the cosmic avalanche and emerged victorious! Everyone went mad with ecstacy.

The arm of the cosmic doom had not been dense. And earth's speed, aided by her thinning atmosphere, had swung her safely through.

When the whirling planet plunged out of the flood of Dust, her rapid spinning soon shook off most of the world-particles. The menace now stretched like an inky smudge after the runaway globe.

On, on, on across the starry waste wheeled earth, hurtling away from the solar system and the black menace. So far away was the rocketing planet, that the sun was no more than a twinkling dot, glimpsed through a gap in the inky sea. Somehow the moon had

(*Continued on page 428*)

Deep Sea Justice

By Ed. Earl Repp

Author of "The Second Missile"

THE submarine is still in its infant stage, in view of the vast possibilities that can even now be seen for its development. During the World War submarines were used almost entirely for sub-sea warfare purposes, but perhaps it won't be long before submarine transportation—freight and otherwise—will be made standard. Also, submarines will necessarily effect an excellent means for deep sea exploration work. Wonders of gigantic proportions may, in the future, be discovered in depths beyond that which man has thus far been able to attain. In this story, Mr. Repp concerns himself mostly with one possibility, which he weaves into an absorbing tale of unusual interest.

Illustrated by MOREY

A BITTER, marrow-freezing February gale shrieked out of the early morning darkness along the Manhattan waterfront, as the American Sub-Sea Transport Company's trans-oceanic super-submersible, the A-T 72, slid like a gray ghost from her berth and headed for open water. The wind howled like a tormented soul about the conning tower, causing Chief Quartermaster Bentley to curse bitterly the lure that enticed men to sea. He gripped the steering apparatus on the bridge with stiff, numbed hands and hunched his head deep into the collar of his fur-lined pea-jacket, leaving only his stinging eyes and nose exposed to the biting wind and spray.

A gray shape loomed up presently in front of the iron monster of the depths. Bentley snapped a freezing hand to a chain-cord and pulled it savagely. Instantly the gloom was torn by the shrill scream of the sub's sirens which, in combination with the howling wind, created a bedlam of noises around the slow-moving undersea boat. With a twist of the wheel he sent the craft lurching sideways out of the path of the incoming yacht.

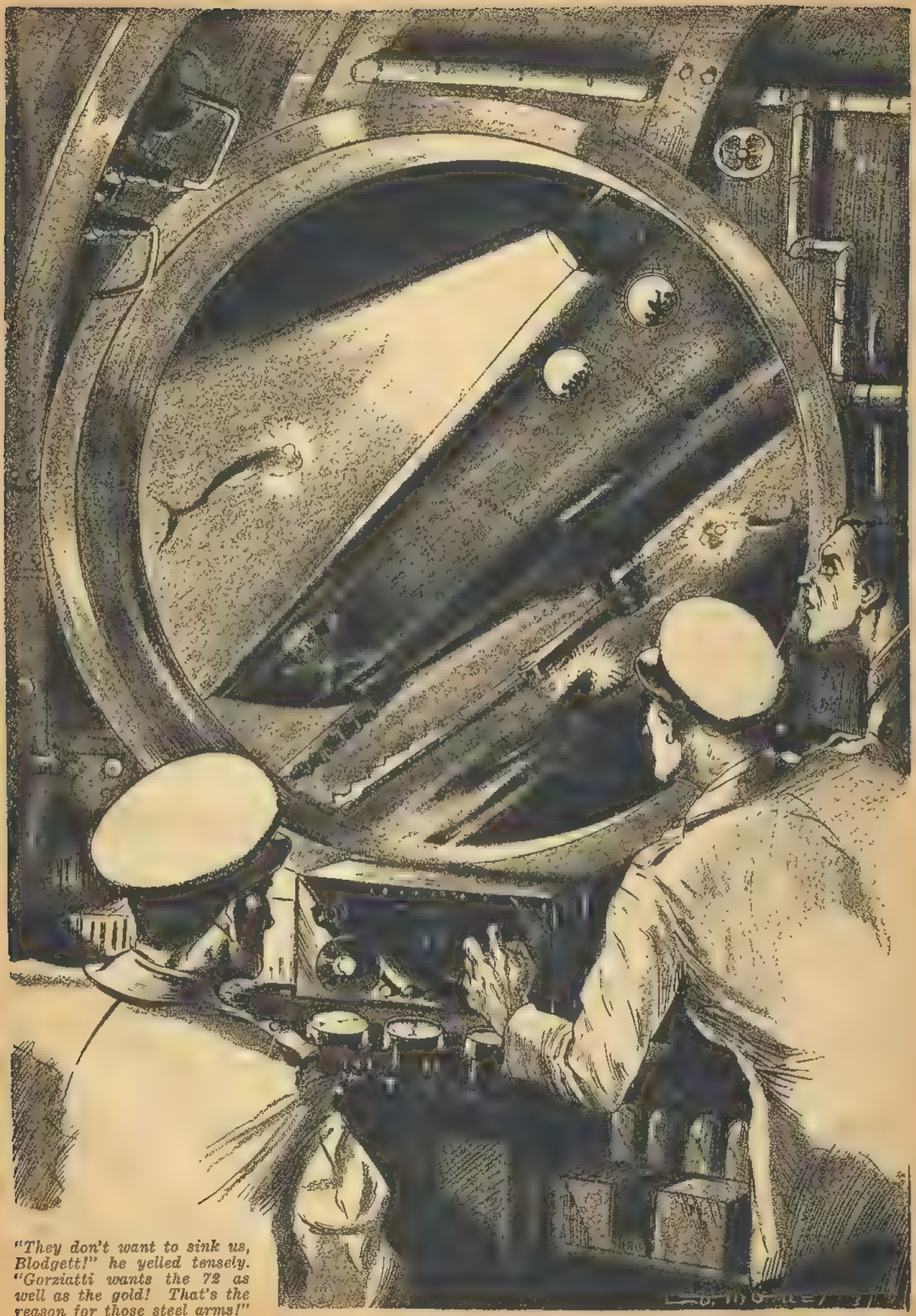
"The lousy loafers!" Bentley swore as the trim pleasure ship swept past. "I'll bet she's got a cargo of wheezin' drunks! I'd like to have my hands on her pilot's throat! I'd teach him a few things about caution and other men's rights!"

Had Bentley been less attentive to his job of working the submarine toward open sea, there would have been a collision undoubtedly. The big white yacht had been hogging the channel, her pilot either drunk or half asleep in the warmth of her pilot-house. But Bentley was accustomed to close calls.

He had spent most of his thirty-five years in submarines; had joined the American Sub-Sea Transport Company's ranks ten years before, as an able-bodied sub-seaman. That was in 1970. But what irked him now was the fact that he had to stay out in the arctic blast until the A-T 72 cleared the harbor and submerged. The looseness of the yacht's pilot did not go to elevate his spirits, though the incident made him even more cautious and alert.

There were a hundred men below depending upon him for safety. And in the submarine's cargo was a shipment of close to a half million dollars in gold bullion consigned to the International Peace League from the United States Government itself. So the A-T 72 must reach Liverpool and it was part of his duty to see that she did.

This was the first time the A-T 72 had ever transported such a large amount of gold. The other craft



"They don't want to sink us, Blodgett!" he yelled tensely. "Gorziatti wants the 72 as well as the gold! That's the reason for those steel arms!"

of the company, of course, had been carrying the United States' donation to the League for years. As a matter of precaution nobody knew until the hour for sailing what craft was to take the consignment. The A-T 72, though one of the fastest and most reliable craft in the company's undersea fleet, had always been spared the extra trouble of handling these shipments. It meant delay, added precaution and no amount of worry, and Bentley looked upon it as an evil omen.

He had come from a long line of seafaring ancestors, who had handed down to him a certain sense of superstition. It had smouldered in his system like a dying fire until now. In the old days gold often caused mutiny and deep-sea skippers avoided carrying it, if they could. Bentley did not know what the precious metal in the sub might cause, but he had a vague suspicion that something unsavory would come of it. Just what it was he could not guess, though the more he thought of the bullion, the more he hated the job of handling and delivering it.

The sky was becoming buff-colored in the east when the craft finally doused her sharp snout into an angry sea just outside the harbor. The full force of the biting gale struck Bentley square in the face. He pulled his head into his collar again like a turtle withdrawing into its shell, and peered into a bank of thick fog that was rolling in from the sea. Above it he could see the brightening eastern skies grow suddenly dim with menacing storm clouds. But he did not mind the warning. In another few minutes the A-T 72 would submerge to her cruising depth and he could warm his fingers. The storm and wind could blow to Hades for all he'd care then. What transpired on the surface after the submersion would interest him little.

After a final mile of slow cruising on the surface, a gong sounded somewhere in the A-T 72. It was the signal for the surface pilot to go within. Bentley went at once to the conning hatch and eased his big frame through it. Scarcely had his head and shoulders vanished, than the hatch-cover dropped into place with a snap. Immediately the sub's nose pitched under the surface as though some giant invisible weight had suddenly pressed it down. From under her broad fantail shot a stream of boiling brine that soon became a narrow wake. Then the A-T 72 vanished from the surface like a great whale submerging with a sudden dive.

Inside and out the A-T 72 departed almost abruptly in design and in details from the submarines that made their appearance in the early days of the World War and shortly thereafter. It had been an awe-inviting event for the slow, clumsy *Deutschland* to cross the Atlantic to the United States from Germany at the outset of the world-wide unpleasantness. But since 1940 under sea transportation had grown in leaps and bounds until it became a great commercial industry. Development of the submarine from the slow-moving class to a high degree of speed, with increasing efficiency and safety, had just about made surface shipping obsolete. Monster steel steamships of the surface were rapidly going the way of the square riggers of whaling days, because under sea travel was faster, cheaper and more comfortable.

The A-T 72 was indeed a giant of the submarine world. From stem to stern she measured some four hundred feet. Where the old *Deutschland* had been heavily "bellied", like some bloated mammal of the deep, the A-T 72 and all subs of her class were long, narrow, and efficiently stream-lined. Improved Diesels were the source of driving power, but a new form of fuel had been developed for them, doing away completely with the heavy oil of earlier days. This new fuel came in the form of the highly concentrated chemical *subcite*, an odorless, smut-free combination of natural resources. Less than one half pint of *subcite* gave two brake horsepower-hours. These motors charged the storage batteries when the craft emerged.

Four compact Diesels in the A-T 72's engine room gave the black gang ample room. There were no cramped quarters anywhere in the craft. Her cargo holds could carry almost as much freight as the surface steamers, and living quarters for the crew and officers were as spacious, clean and comfortable as any to be found above. A constant pressure of washed oxygen kept the air inside as pure as the gentle winds of spring, regardless of depth, which was almost unlimited. The craft were constructed to withstand the tremendous pressures and currents of the subsea world at almost any depth.

As he thawed out his half-frozen fingers over a radiator in the control room, Chief Quartermaster Bentley's peculiar premonition, that something was going to happen, grew in his mind constantly. By noon that day he was pacing the interior bridge like a caged lion, cursing the ill-luck that had caused the A-T 72 to be chosen to carry the bullion abroad on this occasion. He was accosted presently by Captain Blodgett.

"What the devil's wrong with you, Bentley?" the captain inquired curtly. "You've been acting strange ever since we submerged."

"Damned if I know, Captain," said Bentley truthfully. "Something's been telling me that we're in for some unexpected trouble. For one thing, that damned bullion is worrying me, sir."

"You're all upset from having to go through that bad weather outside," the captain shrugged. "Listen to the rumble of the storm!"

The storm continued unabated on the surface. Thunder crashed down upon the fretting sea almost continuously now, to be heard within the A-T 72 like the muffled boom of distant artillery. But the submarine sped through the water at a depth of sixty fathoms as steady as a barge in a dead sea. She was averaging seventy-five knots per hour and throbbing as gently as a high-velocity dynamo. Through the thick quartz observation panels that lay the vast ocean domain open to view from the bridge, the water could be seen sliding by in unbroken walls.

"Mighty bad weather, all right," Bentley acknowledged with a frown. "I'm damned glad to be inside and well out of it."

Chief Quartermaster Bentley was a giant of a man with a powerful neck, a square-jawed face and a shock of hair that was beginning to gray at the temples. His fists were like mallets, his arms like cargo booms and he had a heart that was as big as the inside of a hatch. As an able-bodied sub-seaman, he had been as hard as capstan heads and Captain Blodgett, small in stature but large of heart, liked him as did everybody else. But Blodgett had never before seen Bentley act as strangely as he was acting now. His eyes were like shifty orbs, casting about furtively, suspiciously. Some deep lying trouble was bothering him immensely and Blodgett wondered.

"Snap out of it, Bentley," he said. "Nothing's going to happen."

Bentley eyed him curiously as the smashing roll of a thunderbolt sounded within the sub. The A-T 72 heeled slightly in a rip current and went on unchecked.

"Do you believe in hunches, Captain?" he asked seriously, cocking an eye.

Blodgett grinned amusedly.

"In a way, yes," he replied quickly, "but never to the extent where I let 'em bother me. Why?"

"Well," drawled the chief, "the trouble with me today is that I've got a hunch that that bullion is never going to reach Liverpool."

"Bosh!" grunted the captain. "You're as superstitious as a coon in a graveyard. The gold is in the vault between my stateroom and yours. We make no stops until we reach Liverpool. How the devil is anything going to happen to the stuff?"

Bentley shook his head negatively.

"That's just it," he said flatly. "I know it's safe now, but what if . . . "

"What if what?" Blodgett cut in.

"Supposing somebody got tipped off that the A-T 72 was carrying it?" the chief continued.

"Well, what of it?" snapped Blodgett, growing suddenly bored with the continued apprehension of his subordinate. "We're safe from any kind of interference. After we reach Liverpool, it will be up to the Limies* to protect it!" He thumped the chief on the back stiffly and added: "Forget it! Nothing to worry about!"

But Bentley could not forget it, nor could he quit worrying. He cursed himself roundly for a fool and in an effort to relieve his mind he detailed the helmsman to a brass polishing job, and took over the wheel himself. As though in a hurry to reach port, he signalled the engine room for more speed. The submarine lurched forward, her powerful headlights sending brilliant beams ahead. She slid through the gray depths like a great fish, turning up 90 knots with scarcely a tremor.

IT was 4:30 that afternoon when Bentley's hunch began to materialize. The A-T 72 had been cruising steadily east north east when the first hint of an impending catastrophe flashed across the vision of those in the pilot room.

A monster submarine had suddenly darted in front of the A-T 72 as if from nowhere, glistened blindingly under the glare of the headlights, turned sharply and came alongside. Blodgett and Bentley, at the quartz windows, watched with mouths agape the peculiar actions of the strange craft. They saw men peering through her observation ports at them, and then the radio operator stuck his head through the door of his quarters and yelled.

"Captain Blodgett!" the man called a trifle wildly.

The captain turned and glared at him through uneasy eyes. The operator held up a square of paper. Blodgett walked across the bridge and took it. Bentley's eyes followed him and he saw his superior go suddenly pale.

"My God!" he heard Blodgett groan. "Bentley!"

Realizing that something was wrong, Bentley cleared the bridge in a half dozen steps and stood beside the captain. Blodgett's hands trembled and the tendons in his jaws worked jerkily.

"What's wrong, Captain?" the chief inquired quickly.

Blodgett's eyes flashed on him and he held out the paper.

"Read that, Bentley!" he mumbled oddly. "You were right in your hunch! We're being held up!"

Bentley took the missive and glanced at his superior incredulously. Then he read the message that had been radioed by the mystery craft that cruised alongside of the A-T 72. His jaw dropped in amazement.

"Well I'll be damned!" he exploded and proceeded to read the message aloud.

"Captain Blodgett,
Submarine A-T 72,
Heave-to at once and blow your diving tanks for ascent to the surface. We want every bar of that bullion you have aboard and will get it if we have to send you to the bottom. No reply necessary.
Gorziatti (alongside)"

"Well I'll be damned!" repeated Bentley, returning the radio message to the captain and clenching his mallet-like fists. "Who the hell is this Gorziatti?"

Blodgett stood silent, his eyes riveted on the mysterious undersea raider visible through the quartz exposures. He looked up at his chief quartermaster with a black scowl.

"The dirty sculpin!" he snarled angrily. "That Gorziatti is one of the killers who escaped in a submarine from the French penal colony on Devil's Island ten months ago! I'm pretty sure of it for I recall the name distinctly!"

"I thought I recognized that name," said Bentley with an incredulous shrug. "The newspapers were full of it. Wasn't he the bird who was deported from the States several years ago?"

Blodgett nodded.

"I wouldn't be surprised," he said. "The name is one that sticks in the mind. If he's the man, we'll get no mercy from him. If we hand over the bullion he'll sink us to hide his crime!"

"What are you going to do about it, sir?" Bentley grumbled.

"What can I do, Bentley?" Blodgett said gloomily. "They must mean business and will doubtlessly sink us, no matter what we do!"

"Then by God, I'd tell 'em to go to hell, sir!" snapped Bentley. "We won't have a Chinaman's chance if we blow the surface! They'll send us down with open hatches!"

Blodgett looked at the message again, read it with moving, silent lips and then suddenly crumpled it into a ball. Savagely he hurled it to the deck and ground it under his heel. The two subs scraped paint with a rending crash. Bentley braced his legs and grabbed at the captain as he toppled sideways from the slight collision. The helmsman turned his head toward the captain, his eyes popping with fear.

"They done that a' purpose!" Blodgett hissed from between clenched teeth. "But they'll not get away with it! To hell with Gorziatti! You take the controls, Bentley and race the wop back to New York!"

He turned quickly and bellowed at the radioman.

"Jackson!" he snapped bluntly. "Radio the chief commander of the United States Undersea Forces at Norfolk for help. Give 'em our position at fifteen minute intervals! Snap to it!"

There came the sound of scraping feet on the companionway leading up to the pilot room from below. Chief Engineer Roberts appeared suddenly, his face white, and breathing hard from the long run forward from the engine room.

"What the devil's up, Captain?" he shouted. "Run onto a bar?"

"Don't get excited, Mister Roberts," said Blodgett scowling. "Get back to the engine room and keep those monkeys working!"

CHIEF Quartermaster Bentley shoved the helmsman aside roughly and took over the guidance of the A-T 72. If Blodgett wanted a race, he resolved to give it to him. He glanced quickly at the raider moving along beside the A-T 72.

The craft was slightly smaller than the big freighter, though even more narrow and stream-lined. Bentley knew at a glance that she was the latest type of under sea craft to be built by the French. But painted over her nose was a square of black in the center of which

*Limies, a slang name for English sailors; derived from a statute requiring sea-going ships to carry lime-juice as an anti-scorbutic for the crew

was a human skull and cross-bones, the traditional insignia of the old time surface pirates. He stared at the significant skull for an instant and then sneered at it contemptuously.

"Well, old Captain Kidd," he mused to himself. "You might get the gold, but you'll have to do some tall maneuvering first!"

He shook his fist at the leering faces that lined the submarine's observation ports and with one hand on the signal lever, he yanked it far to the left. Instantly there was a terrific recoil as the A-T 72's powerful screws reversed. Like a dart the raider shot ahead at 90 knots. Bentley was hurled forward violently by the force of the sudden reversal and bumped his abdomen cruelly on the iron wheel. A heavy thump behind him caused him to look around in time to see Blodgett's body rolling across the deck. He smiled grimly and grabbed the lever again. This time he shoved it down to the right. Quickly he spun the wheel and manipulated the elevator controls.

Like an airplane stunting in mid-air, the A-T 72 shot into a headlong dive at full speed ahead. She plunged into the gloomy depths at a terrific velocity, turned gracefully and headed back toward New York rising to the surface so as to be able to use her Diesels. As she spun around on the new course, Bentley had a glimpse of the raider's screws churning the water not far to the left.

Gorziatti had not expected the A-T 72 to do what she did and the pilots of his craft had been taken unawares. She had been cruising along beside the freighter at the same speed and when Bentley caused the screws to reverse, she had continued onward. But now the sub was turning like a killer shark. Bentley could see her now through a periscopic screen in front of him. The aperture of the instrument was faced toward the A-T 72's fantail and he saw the pirate coming up behind.

But he noted with satisfaction that the pirate was gaining little if any at all. He glanced at the speed indicator. The A-T 72 was running ahead at full speed of 100 knots per hour. That was her limit. The Diesels were droning perfectly. Scarcely a tremor ran through the great steel fish. The sharp nose of the craft was biting into the wall of water like a knife-edge, throwing it aside with hardly a ripple.

Suddenly he heard the radioman call for Blodgett, and listened.

"Can't get a message through, Captain Blodgett!!" the man bellowed loudly. "The whole band is jammed by the other sub's spark to prevent us from calling help!"

Blodgett groaned and swore with the ease and grace of a mule-skinner.

"Keep trying!" he snapped savagely. "Don't give up!"

"Aye, aye, sir!" the other saluted. "But as long as the band is cluttered up and jammed with the raider's spark, we'll never contact Norfolk or anywhere else!"

The A-T 72 was incapable of fighting the raider on equal terms. She was not equipped with under-sea guns as was the craft commanded, doubtless, by Gorziatti. The pirate submarine fairly bristled with armament that could be fired under water with the same effect as the guns on a surface destroyer. The pirate's guns with muzzles flush with her plates, were seen along her sides, and Bentley wondered why a shot had not been fired by the pursuing craft.

He thought, as he peered into the periscopic screen, that Gorziatti was gaining a trifle, and he sent a call to the engine room for more speed if it could be gotten from the already overworked Diesels. He was rewarded after a moment to see the indicator jerk a few points to the right. There it paused, three points beyond the speed capacity of the engines.

But the A-T 72 did not leave the pirate behind as the chief expected. With a sudden burst of speed she came on rapidly until Bentley thought her nose was kissing the fantail. He let out a stream of curses and glanced around for the captain.

Blodgett had come up behind him and was looking over his shoulder into the screen. Their faces met. Blodgett's features were twisted into a scowl of anger.

"No use, Captain," said Bentley resignedly. "We can't outrun 'em! We'll have to submit or be sunk."

Blodgett swore under his breath. He was boiling with wrath. Suddenly he edged his way closer to the periscopic screen and peered into it intently. The raider was too close for safety now. Her nose was almost scraping the paint on the A-T 72's broad fantail. He saw two jointed objects suddenly shoot out from under the pirate craft like the mandibles of a beetle, seemingly to grab the freighter in a strange embrace. He was stunned by the sight and then yelled loudly.

"Dive, Bentley!" he screamed. "Dive!"

Bentley's hand was already on the elevator controls. He manipulated them instantly and the A-T 72 went into a sudden plunge downward. They had a glimpse of the pirate darting overhead, her amazing mandibles reaching downward like clutching fingers. Then she likewise spun into a dive with the swiftness of an airplane keeping on the tail of a fleeing enemy craft.

The quartermaster had a sudden thought and he explained it excitedly to the captain.

"They don't want to sink us, Blodgett!" he yelled tensely. "Gorziatti wants the 72 as well as the gold! That's the reason for those steel arms! They intend to grab the ship and hold on, forcing us to stop and ascend or go down to bottom. They'll be able to board us in either event!"

"But those uncanny feelers, Bentley," said Blodgett in astonishment. "Good Lord, they make the craft look like some deep-sea beetle!"

"They're mighty clever instruments, Captain," said Bentley, "and once they get hold of the 72 there'll be no getting away!"

"Then it's up to us to keep out of their reach!" Blodgett growled. "Dodge 'em all the way back to New York!"

"They'll sink us sure as hell if they think we're going to escape," swore Bentley. "Then, after we're strangled to death on the bottom, they'll cop the bullion and be satisfied!"

NEWS of the daring raid spread over the A-T 72 like wildfire. Sleeping watches were aroused from their bunks and ordered to stand-to for orders. Men began to assemble in the alleyways and on the decks. A group of loud-talking enginemen congregated at the companionway leading up to the bridge. Blodgett and Bentley could hear them talking in low, excited voices as they clung to various hand-holds for support against the drunken gyrations of the fleeing, dodging submarine.

"I'd blow the surface and give 'em the dirty gold," Bentley heard one of the men say with scant caution. "The skipper's too damned obstinate!"

There was something in the tone of the speaker's voice that Bentley did not like. Once before he had been tangled up with a mutinous crew and if he was not mistaken, the loud-mouthed sub-sea engineman was trying to stir up courage enough in the others to demand that Blodgett submit to the pirate. He stepped quickly aside and gave the wheel to the captain, who had also heard.

Blodgett was far from being a coward, but when it

came to manhandling a mutinous crew, well, he just wasn't big enough physically; so he took the wheel knowingly and without comment, giving Bentley a warm, appreciative look as the quartermaster stepped toward the companionway.

Bentley paused there for a moment to listen for other words from the man below. They came presently and in more certain terms.

"Some of you fellows go over the ship and pass the word that we're gonna make the skipper heave-to," the fellow snarled. "We'll all be seein' hell if we don't do something quick!"

With a bound Bentley went down the companionway. The men below backed away belligerently. One big, grease-smeared engineman stood his ground hostilely.

"You been doing all that gassin', monkey?" Bentley snapped, bracing his legs and resting his massive hands on his hips.

"I was just tellin' these fellows that the skipper ought to heave-to for general safety, chief," the engineman snapped with scant respect. "Ain't a man got a right to talk on this packet?"

Bentley stepped forward and scowled into the man's face.

"You can talk all you want to on this tub," he said with a cold snap in his voice, "but keep your tongue off the bridge! Now get below and stay there!"

"Who's gonna make me?" the engineman hissed.

Without another word Bentley pulled back his right fist and let it fly. It caught the mutinous engineman square on the jaw, felling him like a sack of grain. The others vanished quickly into an alleyway leaving the fallen man where he lay.

"I'm coming back here in five minutes," Bentley snapped, bending over the man who was close to it, but not quite out. "If you're here then, I'll finish up what I started. Now keep your mouth shut and get below!"

He did not wait for the man to get up. Instead he turned his back on him and returned to the bridge. Blodgett was clinging anxiously to the controls. He jumped perceptibly when Bentley came up silently behind him. He turned around with a questioning look. Bentley nodded.

"I don't think we'll have any trouble from the crew," he said quickly, an angry light in his narrowed eyes. "One of the black gang was trying to stir up trouble, but I don't believe he'll try again, sir, unless I'm very badly mistaken."

Bentley peered out into the gray depths and was given the helm again. Strange deep-water denizens flashed silver and black in the flood of light from the A-T 72. A school of weird, grotesque ceratoid fish equipped with phosphorescent fins, feelers and fearful teeth, shot out of the submarine's course. A monster squid, writhing through the water in search of prey, concentrated saucer-like eyes on the steel giant and went astern in a flash.

The chief glanced at the instruments on a panel in front of him. The pressure gauge told him that the A-T 72 was down to a depth of 1000 feet! The air-pressure inside the submarine was beginning to have an effect upon him. It made him drowsy and lazy but he fought it off. The oxygen pumps were laboring hard to maintain some counter-pressure within the craft to resist the squeezing weight of the water outside upon her steel hull. The pumping machinery was beginning to wail dismally, filling the submarine with weird, nerve-wracking sounds.

Blodgett stood silently beside his quartermaster and watched the periscopic screen. The pirate was gaining again, her mandibles outstretched and ready to be clamped over the tail of the fleeing craft. The A-T 72 continued its downward plunge into the greater depths on a gentle 20 degree angle. Gorziatti was following madly in his effort to add more wealth to his coffers and a submarine to his pirate fleet that apparently now boasted only the craft that trailed in the A-T 72's boiling wake.

With a sudden burst of speed the pirate approached close to the fleeing craft. Blodgett and Bentley groaned in unison. Then there came the sound of steel grating against steel, and the A-T 72 shuddered from stem to stern.

"No use, Bentley," groaned Blodgett forlornly. "They've got us now!"

Bentley bent over the screen to study the craft at the rear. He shouted exultantly.

"They missed contact, Captain!" he bellowed. "They missed! Damn 'em! Now watch what happens!"

The quartermaster grabbed the elevator controls quickly and lifted the levers upward, expecting to send the A-T 72 toward the surface in a sweeping ascent. But to his amazement, the submarine refused to respond! Like an uncontrolled torpedo it continued on downward as though in the grip of a powerful suction that was drawing her deeper into the depths.

Bentley spent a frantic moment at the levers, his face going bloodless. Blodgett grabbed his arms tensely and looked over his shoulder.

"What's wrong, Bentley?" he inquired in a trembling voice.

"We're in the grip of a down-suction, Captain!" Bentley yelled. "She won't respond to the elevator controls!"

"Good God!" the captain mumbled. "Maybe the pirate ripped off the elevators when she scraped us!"

"No, it isn't that, sir," said Bentley. "There's a powerful suction gripping us. The elevators are all right."

"Then for God's sake," screamed Blodgett, becoming suddenly fear-drunk. "Blow the ballast tanks and shoot the surface!"

Bentley felt that such a move would be useless, but he nevertheless opened a row of valves on the control panel. Instantly the droning hiss of compressed air sounded in his ears. It increased in volume until it became a muffled roar. Working the levers and the helm frantically in an effort to get out of the suction that held the craft, Bentley finally turned a colorless face toward the captain and shook his head. The craft went steadily downward.

"We're done, Blodgett!" he said bluntly. "God knows where this current will take us. We better save our pumps and use the pressure inside to equal the water-pressure around us. We might run out of the suction in time!"

"What's Gorziatti doing?" Blodgett hissed, edging closer for a look into the screen.

"They're behind us!" said Bentley. "And they're having the same fight on their hands! Look at her men running around madly inside her."

Through the observation panels on the pirate ship, men could be seen running frantically over her interior bridge.

The pirate craft was wiggling and gyrating weirdly as her pilots endeavored to take her out of the mysterious grip that held the A-T 72. The submarines seemed doomed.

Perhaps Gorziatti regretted his mad piracy now, but it was too late to make amends. His daring apparently was going to send him to his death, and a hundred men within the monster freighter would accompany him and his crew. They had gotten into a deep-sea current and only the hand of Providence could save them from inevitable doom.

BENTLEY clung doggedly to the controls, never once giving up the fight against the mysterious elements. The A-T 72's dials showed that the submarine was now down to a depth of 1200 feet and still going down, her screws in full reverse to stay the rapid descent. Her screws might have been dead and still for all they helped. Their motion was only a waste of batteries and had no effect whatever on the suction.

Presently the radioman stuck his head through the door of his compartment and called to the skipper. Blodgett spun on his heel hopefully and strode quickly toward him.

"Get Norfolk?" he snapped, his eyes popping.

The radioman shook his head.

"The only thing I can get now is the pirate submarine, sir," he said, trembling.

"What do they say?" Blodgett asked.

"Gorziatti wants to talk with you," the operator replied. "I've got him on the phones now, sir."

Captain Blodgett went at once into the radio-room and sat down at the receivers and transmitters. He picked up the earphones and placed them over his head.

"Hello!" he called. "Captain Blodgett of the A-T 72 speaking!"

"Good evening, Captain!" he heard Gorziatti say in a pleasant, but fearful voice, from the pirate craft. "It behooves me, mister, to say that I am dreadfully sorry to have placed you in such a predicament. I——"

"Don't trouble yourself with apologies, Gorziatti!" snapped Blodgett, cutting in. "You'll suffer a thousand times for your career of outlawry!"

"How well I know it now, Captain Blodgett," replied Gorziatti soberly. "But can't you get your ship out of this damned suction?"

Blodgett laughed loudly as though sensing fear on the part of the pirate leader.

"Not getting frightened are you, Gorziatti?" he inquired with sarcasm.

Gorziatti was heard to swear softly under his breath.

"Personally I have no fear, captain," he said, "but my men are on the verge of open mutiny. Your craft is the bigger. Can't you somehow break the suction and lead both subs out of it? I promise not to cause you any more trouble."

"I'll drink the waters of hell before I'll lead you to safety!" snapped Blodgett tensely. "I can maneuver the 72 out any time I desire, but as for you, I'm merely leading you to the bottom and . . . doom!"

Blodgett knew he could not get the A-T 72 out of the suction, knew the futility of even trying, but he derived some satisfaction out of the thought that his lie would cause the pirate and murderer to suffer.

"Then by God you're going to lead us out!" Gorziatti barked sharply. "I'll train our forward guns on you, Blodgett, and blow you to hell before I'll let you escape!"

"Do it!" retorted Blodgett. "You'll *never* get out if you do!"

To show his contempt for the man who had been responsible for the position of the submarines and the uncertain predicament of the men within them, Blodgett yanked the phones from his ears and dropped them beside the transmitter. He turned to the operator.

"See if you can get Norfolk again!" he said savagely. "I think you'll be able to get 'em now!"

The radioman shook his head strangely.

"I'm sorry to report, sir," he said gloomily, "that by some strange phenomenon our radio range is limited only to a few hundred feet. The pirate has been silent for some time and I kept calling Norfolk without results. Then I looked at the range dials and found that the wave was dying off at three hundred feet. Gorziatti contacted with me then, sir."

Blodgett hung his head sadly. The radioman sat down again to his instruments and began calling futilely. Blodgett halted in the center of the pilot room and bit his lips in meditation. His hands shook palsiedly and his eyes flashed with a wild stare. He did not notice the fact, but from his ears dribbled thin streams of blood, the result of the tremendous air-pressure about him.

Bentley, an iron man, had felt no other effects of the terrific pressure than a slight drowsiness, but he knew what was causing it. He wondered how the men below were faring. He was soon to know, however, for suddenly, the Chief Engineer popped out of the companionway and stepped onto the bridge.

"Those devils in the engine room are going nuts, Captain Blodgett," he cried. "I can't hold 'em in any longer. The pressure of air is so strong down there that every man is bleeding profusely from the ears and nose."

"I can't help it, Mister Roberts," the captain replied scowling. "We're no better off up here! You might as well tell 'em that it'll be all over soon! We're heading straight for hell and can't change our course!"

"If I tell them that, sir," said Roberts, "there'll be hell to pay! Are you sure there's no chance for us?"

Blodgett looked at him hard for a moment and then shook his head significantly.

"The sub's caught in a bottom suction," he said, "caused, no doubt, by some tremendous under-sea abyss. We'll have to go where it carries us, and . . . that dirty pirate of a Gorziatti will go with us!"

"Is he caught in it too?" Roberts gasped.

"His sub is right on our tail, Mister Roberts," said Blodgett. "Moreover, he threatens to turn his guns on us if we don't do something to break the water-suction. That's an impossibility!"

Roberts sucked in his breath and stared about him wildly. Bentley still stood at the useless controls, peering intently into the darkening depths. Night was falling on the surface of the sea and with it came the darkening of the abysmal under-sea world. Great schools of strange-looking fish were now visible from the bridge. They seemed like streaks of vivid flame as they shot through the water. Many of them had grotesque lights of glowing phosphorescence dangling from their heads and bodies.

"How far down are we, Bentley?" Blodgett snapped, noting that the great pressure was forcing water through the seams of the steel hull.

"Fourteen hundred feet, sir," said Bentley without turning around. "There's a gaping hole directly in front of us now and we're going into it."

"A sub-sea river?" Blodgett was amazed and appalled.

"Looks like it, Captain," Bentley replied quickly. "We'll smash up sure if the tunnel narrows."

Blodgett and Roberts raced to his side and peered into the screen. The A-T 72's powerful lights played on what appeared to be an under-sea mountain wall. Directly in front was a tremendous opening in the wall. The strange suction drew the submarine into it. A sudden, brain-deadening roar crashed down upon the unfortunate craft. There was a terrific crash above and the screen went dead as the periscope smashed against a projection at the entrance of the abysmal cavern.

The officers were hurled flat to the deck by the impact and recoil. Bentley looked up expecting to see a rush of water pouring through ripped seams. But none came and he breathed a sigh of relief. He looked around for Blodgett and Roberts. The chief engineer was picking himself up slowly from the deck. Blodgett lay in a silent heap in a far corner, completely knocked out in a collision against a frosted oxygen tube.

The A-T 72 wabbled drunkenly, swaying from side to side in a steady roll. Roberts looked at the inert form of Blodgett and then at Bentley. Together they went to him. The quartermaster scraped a handful of frost from the tube and began rubbing the captain's brow. Gradually Blodgett regained his senses and finally stood erect, to hear the excited, fearful voices of the crew on the deck below. Anxious faces peered at him from the companionway. But there came no threats from them now.

"I'm sorry, men," said Blodgett wearily and holding his aching head in his hands. "You might as well know it now. We haven't a chance to get out alive! We are doomed men . . . all of us, so let's take it like men . . . like American seamen are known to take it!"

There was a hum of voices for a moment and then it died down. The submarine became a place of deadly silence. The batteries had already been cut off. They were as useless as the elevators and rudders against the monster force that held the A-T 72 in a terrible grip of doom.

A THIN trickle of blood exuded from each of Bentley's ears and spread like searing metal against his pounding neck. He muttered a stream of oaths and mopped his neck with a shaking hand. He was startled by a sudden scream behind him and turned, crouching. The radioman was dashing across the bridge like a mad-man, his face covered with blood.

Roberts pounced upon him in an instant and bore him to the deck. The man was a raving maniac. His eyes popped nearly out of their sockets and he clutched, with absolute frenzy, at the sides of his head. The pressure of the air had sent him into stark insanity, and perhaps had already shattered his eardrums.

"Truss him up, Roberts!" bellowed Bentley authoritatively. He had no say over the Chief Engineer, but it was every man for himself now and Roberts bore the insane fellow to a cabin. He hurled him inside and closed the door with a slam. The radioman beat upon it insanely and unless he bashed out his brains on the bulkheads, he was safe for the time being.

"Steady, men!" Roberts called to those at the bottom of the companionway. "Keep your heads! We might get out of this yet!"

Only by an iron determination was Roberts himself able to maintain his senses under the unnatural pressure to which they were being subjected. Every man in the craft fought a snagging something that clutched at their wills in an effort to snap them. The uncertainty of waiting for the collision they thought would eventually come, caused them to find darkened corners, there to crouch with their aching heads in their hands.

Then suddenly something happened that made every man jack of them leap to his feet and stare questioningly toward the bridge. The A-T 72 suddenly settled on the bottom, slid along it on runner-like apparatus that ran along the under-hull from stem to stern for grounding purposes, and lay still. Instantly a safety pressure valve snapped off with a roaring hiss. The pressure inside the A-T 72 lowered rapidly, too rapidly for safety.

Blodgett pitched forward on his face as a terrific crash caused the still undersea boat to shudder and roll slightly over. Men screamed on the under-deck. Bentley clung to the controls for support; then through the quartz panels he saw the pirate craft plunge nose-first into the ocean bottom, her dying screws spinning within a dozen yards of the A-T 72's nose.

What had happened? Where were they anyhow? Was Bentley looking into a pit of Hades or was he actually seeing a great waterless cavern that glowed on all sides with a brilliant phosphorescence? He glanced around for Roberts and Blodgett.

Both of them were lying flat on their faces on the deck, as though they had been felled by some hidden hand. With a bound, Bentley reached their sides, bent over them as they lay side by side, and groaned.

The sudden release of pressure from the submarine had given them bad cases of the caisson disease*! Bentley paused to listen. From the deck below came low, muffled groans from men who had likewise suffered. But why hadn't he been taken down with the bends? There was little time to think about that now; he merely laid the reason to his own marvelous physique and powerful system.

Without delay Bentley raced to the controls again and spun open a number of valves. At once the oxygen tanks began to hiss. He watched the gauges rise as the pressure mounted and finally felt it squeezing him. He closed the valves again and opened another one, allowing the air to escape gradually. After long, nerve-wracking minutes of turning on and closing the valve, he was finally rewarded by a movement of Blodgett's hands. Roberts likewise groaned and moved.

Bentley heaved a sigh of relief. The decompression process had been successful in the cases of reviving the Captain and the engineer. He finally stooped over and lifted Blodgett to his feet. The man trembled from head to foot but was able to stand up. Then Roberts managed to get on all fours and the quartermaster aided him to stand. Their faces were bloodless and blood still ran from their ears and nostrils.

A sound of men moving about below came to their ears. Bentley nodded knowingly.

"They'll be all right in a few minutes," he said to Blodgett. "The bends hit the ship as soon as the pressure was relieved. How do you feel, Captain?"

"Wabbly, Bentley," Blodgett said. "What happened?"

"We've entered some sort of a sub-sea air-pocket, sir," said Bentley, nodding at the quartz panels. "Look out and see what you can make of it."

Both Blodgett and Roberts went quickly to the panels and peered out. A glowing cavern of tremendous proportions met their gaze. The pirate submarine lay not far ahead, on its side, and it was lying as though beached along some shore, completely out of water!

"Good Lord," Roberts gasped. "I don't understand—"

"You will before long, Chief," said Bentley coming up. "We're caught in an air pocket far under the surface, probably deep within some submerged mountain range! The suction carried us along until we hit this peculiar place and then dropped us right into it, probably to die here! I think the under-sea river rises back a way, and continues on overhead, perhaps to the surface again. But here we are and I think it's as safe to go out there, as it would be to stroll along Fifth Avenue in old New York!"

Blodgett looked up at him incredulously. His eyes were filled with disbelief.

---

*Caisson disease, more commonly known as **The Bends** which some divers suffer when hoisted to the surface too rapidly. While it is safe to lower a diver quickly, caution must be taken in raising them from the squeezing pressures of the sea in easy stages. To hoist a diver straight up without regard for pressure invites a dangerous and sometimes fatal attack of the caisson disease. The result is the same in cases of heavy air pressure. The pressure must be lowered gradually. Otherwise Bends is caused by nitrogen bubbles forming in the blood and tissues. Sudden popping of the safety-valve in the submarine causes the pressure to lower too swiftly. When a person breathes, a certain amount of nitrogen gas from the air goes into solution in his blood. The higher the pressure the more gas goes into solution and it does not come out faster than the lungs can pass it out of the blood. If the pressure is relieved too suddenly as in the case of the A-T 72, the nitrogen comes out of solution too rapidly causing the blood to effervesce like a bottle of soda water when the cap is removed. To revive sufferers, they must be placed immediately in decompression tanks in which the pressure is placed at a high degree and then lowered or relieved slowly until the lungs pass the gas out of the blood. It has been proposed to use a mixture of helium and oxygen for high pressure work, because helium is very slightly soluble in water, and hence is not taken up by the blood.

"That's impossible, Bentley!" he said. "Aren't we dreaming a dream of the dead?"

"Don't fool yourself, Blodgett!" said Bentley. "We're right in an under-sea airpocket and here we'll stay until we die. Where we are, I don't know, but I know one thing, we'll never be able to get the A-T 72 back in water again. Let's go out and look around."

"What do you think caused this pocket, Bentley?" Roberts inquired, regaining his strength rapidly.

"I'm not a scientist, Roberts," replied Bentley, "but in my opinion there is a tremendous amount of air escaping through the sea bottom into a great cavern, from the interior of the earth, forcing the water out of it by a constant pressure, much in the same manner as we force the water from our diving and ballast tanks. Of course I may be wrong, but that's my opinion. I can see no other reason or cause for the waterless place far under the sea, and we're nearly two thousand feet below the surface."

"My God!" groaned Roberts. "Two thousand feet!"

"Buck up, Chief," said Bentley, placing a hand on the other's shoulder. "We're lucky to have gotten through that tunnel! Wonder how Gorziatti fared in his crack-up?"

Together they looked toward the other submarine. No sign of life could be seen there, but Bentley did not believe they had all been killed. The pirate's screws were still now. He wondered if they had died from disablement or whether someone had shut down the engines?

THE A-T 72's officers were appalled at the toll the bends had taken in the ranks of the crew. When they reached the lower deck to inspect the men, they found it cluttered with dead and dying. Despite Bentley's rise to the decompression procedure, only the strongest of the lot survived the terrifying ordeal. But it was no time to weep over it and the Chief Engineer immediately called those alive together and explained the situation. Some of the men blubbered like frightened infants while others lifted their heads and took it like men.

The radioman was dead when Roberts opened the door of the cabin in which he had been placed. The poor fellow had deliberately knocked out his brains against the steel bulkheads, irresponsible for his act because of his insanity. Then with Bentley, Blodgett and Roberts at their head, the remainder of the crew went out of the submarine through an airlocked escape hatch.

The strange under-sea cavern was a place of terrible drafts and eerie sounds. A terrific wind smacked the fear-filled men with potent violence, bowling some of them over completely. Bentley leaned over against the pressure of the drafts which droned around his ears, and stared about him in open-mouthed astonishment.

The place was as dry as the interior of a summer house, but it was cold, very cold. The men were not uncomfortable except for the biting drafts on their faces. Bentley stamped on the bottom and found that it was as solid as flag-stone under his feet. But a few feet away was a gaping hole, an abysmal shaft about five feet wide, running down into the earth. Wind poured out of it with a low, droning hiss. He warned the men to stay away from the hole and then glanced at his chronometer.

On the surface it would have been dark, for it was well past seven o'clock. But in the cavern, it seemed like twilight. The walls of the place glowed like fox-fire, the glow of phosphorescent wood, casting ghastly shadows on every hand and throwing a ghostly light on the faces of the men. The roof was like some tremendous proscenium arch in a monster theater. Bentley stared upward at it marveling at the strange luminosity that made every nook and cranny visible. He wondered what had become of the deep-sea suction or river that had drawn the A-T 72 into such a place. It had vanished altogether and he could find no signs or traces of it, though he knew that the great stream ran about him somewhere, for he could hear a muffled roar like water plunging over a falls.

"We had better take a look at the pirate submarine, Captain Blodgett," he said eventually, facing the captain. "Maybe some of the poor devils need help. Looks as if the nose of the craft is smashed!"

"If you're thinking of Gorziatti, Bentley," Blodgett scowled, "he can rot in hell before I turn a finger to help him!"

Bentley nodded meaningly.

"I'm thinking about his men," he said. "We may need them!"

"What do you mean, need them, Chief?" Roberts put in.

"You never can tell, Roberts," said the quartermaster bluntly, "what we might encounter in a strange place like this. Anyhow, we may need the men to get out of here, if such a thing is possible."

"You think we'll get out, then?" Blodgett asked queerly. "Your hunches got us into this mess, they ought to get us out."

Bentley looked down into the captain's face for a sign of sarcasm, but he found none. His hunch that something was going to happen to the A-T 72 had certainly materialized uncannily, but he resented any hint that he was responsible for the submarine's predicament. He grinned strangely.

"I wouldn't say that if I were you, Blodgett," he said coldly. "You know damn well that a hunch never leads a man into trouble unless he goes looking for it. But nevertheless, we're here and if there's any way of getting out, we'll find it!"

Cautiously they went to the pirate submarine, found the escape hatch on the port bow and hammered on it. After a moment's silence they heard somebody pounding out an answer and then the hatch shot suddenly open. Like a pack of enraged beasts the pirates fought to get through it. Above their beastly snarlings could be heard the wrathful shoutings of a deep-voiced man whom Blodgett accepted at once as being Gorziatti himself. He swore under his breath. Fate had spared the convicted killer despite the fact that the craft's bow plates were torn and twisted.

With their men bunched around them, the A-T 72's officers watched the others pile out of the pirate submarine. Presently Gorziatti slid out of the hatch, glanced calmly at his men who had assembled away from the freighter's crew, and then strode cockily toward Blodgett and Bentley.

Gorziatti, like Bentley, was a human giant, with long, ape-like arms that reached almost to his knees, bowed legs, powerful shoulders and a black, tangled beard that hid most of his face. His eyes glittered like the orbs of a serpent, looking like emeralds in the ghastly light that glowed on all sides. Around his great waist he wore a cartridge belt, at which hung two pistols.

As he came up, Gorziatti glanced contemptuously at Bentley. The quartermaster had a sudden and violent dislike for the man and the pirate's contempt had displayed a similar feeling there. As a result a deadly antagonism sprang up between them immediately, building rapidly an insurmountable barrier of hate, distrust and jealousy. The pirate leader was openly proud of his bigness, physically. Bentley could see it at a glance, but he had little fear of the man and his fingers itched to grip that whiskered throat.

"Ah, Captain," boomed Gorziatti, reaching out a great hand in greeting. "The best-laid plans of mice and men oft go astray. Don't you think so, mister?"

Blodgett ignored the hand that reached out for his and Gorziatti withdrew it with a black scowl.

"You are Gorziatti, I presume?" said Blodgett coldly, his eyes flashing with hatred.

"At your service," Gorziatti bowed gallantly, "but is my friendly hand a thing of poison?"

"Aye, Gorziatti," said Blodgett sarcastically. "My hand never grips the hand of a murderer and a pirate!"

Bentley watched him shrewdly for a moment and then looked at the men behind the Italian. They were an evil-looking lot at best, but seemed thoroughly cowed by their predicament. They appeared to have little stomach for death and stared about them wildly or conversed in garbled tones. He appraised Gorziatti again.

"Gorziatti," he said calmly, "this is no time for unnecessary talk and mock gallantry. What do you plan to do now?"

Gorziatti gave him a black look and stepped forward.

"When you speak to me, mister," he snapped evilly, "you want to address me as sir! My papers read Captain, mister quartermaster!"

Gorziatti needed no urging to get into action. His big pistols literally shot out of the holsters and into his ponderous hands. They thundered a chorus of doom at the beast . . .

"Oh, I see," said Bentley with a cold, chilling laugh. Roberts edged up beside him and his enginemen backed him up. Bentley continued: "And I'll wager your court papers read *hanging*, too!"

Gorziatti's eyes sparkled with a deadly gleam. He seemed on the verge of leaping at the quartermaster, but somehow smothered the urge. Bentley stood his ground, looking coldly, almost invitingly, at the man. For a moment the tension was terrific. It was a battle of wills that would soon give way to one of physical strength. Bentley knew it and wanted to get it over with, but Gorziatti would have to make the first offensive step before he did anything.

"Well, why don't you come on, Gorziatti?" snapped Bentley.

Gorziatti's eyes fell suddenly.

"That can wait, mister quartermaster," he said slowly. "As you said, this is no time for words . . . and fighting. Let us work together at least until we get out of here. But remember, I'll kill you the first move you make that strikes me wrong!"

"You'll never do it with your fists, Gorziatti!" Bentley told him clearly. "You'll find me waiting for you any time. And you might remember this, too, Gorziatti. You might be a ranking captain to yourself and your men, but to me you are just a dirty snake!"

Gorziatti's right hand shot to his pistol but he thought better of drawing it. He leered at the quartermaster and then turned to Captain Blodgett.

"What are your plans, Blodgett?" he boomed quickly. "Got any?"

"Not yet, Gorziatti," replied Blodgett, glancing at Bentley. He seemed now to rely on the quartermaster and Bentley sensed it.

"We're going to explore this place before we decide on anything, Gorziatti," said the quartermaster. "It is possible that we might find a tunnel leading to somewhere, maybe to shallow water. If that's the case, we'll have to take a chance on being picked up by passing craft."

"Before we start, Bentley," said Blodgett, "suppose we try again to get Norfolk. Figure out our position and have it radioed far and wide. The radio may work all right here."

Gorziatti twisted his matted beard for an instant and then scowled again.

"You keep away from Norfolk, Blodgett!" he snapped, placing both hands on his guns. "Do you think I want the United States Government to pick me up?"

"We don't know whether we can be picked up or not, Gorziatti!" growled Bentley, "but if we are, you're going with us or you'll stay here!"

The pirate crew advanced in a body suddenly and surrounded the Italian. They glowered at him menacingly.

"Listen, Captain Gorziatti," said one of them boldly. "We want to be picked up, if possible. Let 'em get Norfolk. We don't want to spend the rest of our lives here! I'd rather go behind the bars!"

Gorziatti winced at the prick of a knife point in his back. He muttered an oath and glared at Blodgett.

"All right, Blodgett," he said quickly. "Get Norfolk! Get any place!"

"Now you're talking sense," snapped Bentley, elated.

FORCED together by the common emotion, fear, both forces banded together as one and began to explore the water-free chamber. Gorziatti seemed meek enough. He had to be meek and submissive now for a dozen or more blades would have sought his back or throat at the first sign of stubbornness. His crew, already mutinous, would have torn him to shreds with little urging. Bentley saw it and so did Gorziatti. But the hatred that had sprung up between the Italian and the chief quartermaster did not die out. It smouldered like a volcano, ready to flame to a deadly fire.

At first attempt, Norfolk had been contacted. There did not seem to be any interference here, strangely enough, and the A-T 72's powerful wave had penetrated thousands of feet of water and solid rock. Yet the unfortunate men had little hope of ever getting close enough to a prowling rescue sub to be taken aboard. They had no doubt but that they were hemmed in on all sides by walls of glowing rock, never to get out.

As they explored the place, Bentley and Gorziatti avoided each other. For the morale of the men, Bentley felt that this was the best thing to do, for after all, there is loyalty among crooks and any outbreak might cause a fight between the two forces. Gorziatti must have likewise recognized the fact that where there is unity there is strength and it required strength to go on.

After what seemed endless eternities of searching and exploring, Bentley finally made a discovery that sent the blood pounding at his temples. There was a tunnel leading out of the chamber from a far corner, but it descended gradually rather than ascended, as he had hoped it would. And it was as dry as the great cavern though a terrific draft droned through it, making a pressure that would be against them, if they entered.

They wondered where it led. The officers decided to risk entering the gallery and the men were eager to try it. It was better than staying in the cavern, anyhow, and it might eventually ascend to the surface. They retreated to the A-T 72 finally and after a brief counsel it was decided that each man would equip himself with the improved model of the Fleuss diving apparatus, which every modern under-sea boat carried for its crew in case of accident.

There was no air hose connected with this apparatus. The wearer or diver breathes the same air over and over again, an oxygen tank on his shoulder supplying that gas as fast as he uses it up and caustic soda absorbing the carbon dioxide which comes from his lungs. One invention usually stimulates improvements, and the old Fleuss was improved to permit its use even in great depths. The A-T 72 carried one apparatus for each member of its crew as did the pirate craft, but there was no use for all of them, as many men had died in both craft from the fatal bends.

From the storerooms of the doomed subs, food supplies were taken. Each man carried his own rations and bottles of fresh water. The latter seemed unnecessary due to the fact that fresh water oozed on almost all sides from the stone walls of the cavern, and it could be obtained merely by tapping.

The gold bullion was left behind. If Gorziatti had any further designs on it, he did not betray the fact. The wealth seemed forgotten. If they did succeed in finding a way out of the mysterious, ghostly cavern, they could not hope to carry the heavy gold with them.

Closely grouped together with the A-T 72's officers and Gorziatti in the lead, the survivors entered the tunnel, forced to lean far forward to overcome the terrific draft that tugged at them. Slowly they went into the gloomy place, the walls of which cast a pale green glow upon them, causing dread shadows to dance on all sides.

Gorziatti pulled his guns around in front of him and shifted the pack on his shoulders so as to let his ponderous hands free, and went in bravely. Bentley watched him casually as they went. The Italian set his jaw grimly and looked neither right nor left. The quartermaster smiled to himself knowingly. Already the pirate was showing signs of fear, but he kept silent. Blodgett and Roberts plodded beside him, shivering occasionally from the chill of the penetrating wind.

Bentley buckled the collar of his jacket around his throat, shoved his hands deep in his pockets, and watched alertly. Behind came the men, some grumbling, but for the most part silent.

Then suddenly the tunnel began to widen into another great cavern. The officers halted and stared into every corner before continuing. Bentley suddenly gasped and slipped a pistol from his pocket.

In a shadow-filled corner lurked a moving object, like a man cringing in fear. The officers heard the thing scraping against the luminous wall and then Roberts flashed a beam of light at it.

With a shriek, a scantily-clad man, wizened with age and heavily bearded, dashed out of the corner and stood up with arms high in the air. He blubbered like an imbecile. The men were awe-struck. Bentley covered him with his pistol and stared at him, mouth agape.

"Well I'll be damned!" he exploded. "A man!"

"What's he doin' here?' growled Gorziatti, gripping a pistol in each hand.

"Ask him!' snapped Bentley.

Gorziatti stepped forward menacingly and spoke. The fellow cringed.

"How'd you get here, old man?" the pirate inquired.

There came a low, almost inaudible whisper from the fellow's loathsome lips, but it was not intelligible. It sounded like the mouthings of a tongueless imbecile. He emitted a sudden scream, spun around and raced away. The chamber thundered with a terrific explosion from one of Gorziatti's guns. The running figure fell.

"What the devil did you do that for, Gorziatti?" snapped Bentley with an oath.

Gorziatti swung his guns in line with the quartermaster.

"Better the poor devil was dead than living in terror here!" he boomed savagely.

"I wanted to question him to find out if there was any exit from this place!" said Bentley scowling. "Now, we'll have to keep on hunting! Take it from me, Gorziatti! Next time you pull your triggers, I'll send a bullet into your brain! You're entirely too eager to kill. Also, you're a yellow cur to shoot a man in the back . . . a defenseless fellow at that!"

"Yeah?" growled Gorziatti. "Where would you like to get a slug? Between the eyes?"

"Go ahead and shoot, you buzzard!" Bentley roared. "I've got you covered!"

Gorziatti knew he was covered by Bentley's pistol and he shoved his own all too ready guns into their holsters, then shrugged.

"You win again, mister quartermaster!" he snarled. "But not always!"

Without further word, Bentley moved forward across the chamber. The dead man lay in a pool of blood, his face twisted in a grotesque attitude of death. They moved past him and continued onward through the tunnel. Bentley shook his head sadly, almost resignedly, at the discovery of the man, who, he concluded, must have survived some wreck that was drawn into the caverns. But he was worried indeed for the presence of the fellow presented a problem. Was there an exit, or had the man been unable to find it? Why did he remain in this strange world if there was a way out? The quartermaster had a deep-rooted suspicion that every man jack of them was doomed to live and die in these holes of Hades!

Presently the floor of the tunnel began to ascend. Every heart throbbed with hope. Bentley was elated at it and he led the procession forward more rapidly. Fear had made them tireless and it was a hard fight to proceed against the draft that hindered their progress. Moreover, the diving apparatus and supplies strapped to their backs was getting heavy now and it weighted them down, yet in their eagerness to escape from the place, they paid little heed to it.

After an eternity of steady climbing, the tunnel began to descend again. It was getting narrower with each turn now and the men were forced to lengthen out in a long, plodding column. Bentley continued to lead. Captain Blodgett seemed to have given his rank to the big quartermaster, for he was content to follow. He must have recognized in Bentley a greater leadership than he himself could offer. Of a certainty, it was Bentley who could hold Gorziatti in check. That was something Blodgett could not have done, and he knew it.

TIME passed like ages. The men continued on bravely through the ghostly tunnels. The place appeared to have been hewn out by unknown hands in the dim ages of the past and Bentley did not doubt but that they were treading the underground galleries of a submerged continent.

After a time a halt was called. Provisions were eaten raw for there was no fuel to be had for fires. Bentley, Blodgett and Roberts sat alone as they rested and ate. Gorziatti, an outcast even to most of his own men, selected a darkened corner. His beady eyes bored constantly at the A-T 72's officers, but he said nothing. What lay behind his be-whiskered visage was a matter of conjecture, though Bentley felt that the man was thinking hard to devise some scheme to outwit those who sought to apprehend him, should they eventually succeed in reaching land again. He knew, and Gorziatti knew, that there would be no escape this time. If they reached the surface and were picked up by a United States submarine, the pirate would undoubtedly face a firing squad.

Gorziatti was aware of that fact and Bentley had made up his mind secretly that, if it were at all possible, he would see the pirate delivered into the hands of the law. The law, as he saw it, lay in the hands of the commander of whatever craft picked them up, if they ever were picked up. In these modern times a sea pirate would not be forced to swing aloft, but the penalty was death nevertheless.

Presently they continued again with the dread song of the drafts droning about them. Bentley took up the lead, flanked by Blodgett and Roberts on one side and Gorziatti on the other. The men followed close behind, bearing their burdens gamely.

After an hour of plodding, they encountered another chamber. Roberts' flashlight revealed human bones scattered on all sides. He picked up a skull and examined it. The jaws were massive and thick and long, sharp canine teeth gave the grisly relic the appearance of an ape skull. He hurled the thing to the floor after a time and grunted.

"Looks like the skull of a great ape, Bentley," he said, as the quartermaster suddenly bent over to pick up an object.

"Not far wrong, chief," replied Bentley. "Here's a spear-head of flint. I'll wager this place is a great grotto in which our dawn-age ancestors lived at one time."

Roberts appraised the long, well-chipped implement and nodded.

"Guess you're right," he agreed, "but wouldn't science love to get a crack at these bones?"

Gorziatti scowled and kicked at a skull.

"Dead men's bones ain't getting us out of here!" he growled. "Let's get moving. We ain't got time to waste."

Bentley gave him a hard look.

"What's *your* hurry, Gorziatti?" he snapped caustically. "You aren't going any place except to a firing squad!"

"We'll see about that when the time comes, mister insolent quartermaster!" he snarled like a wolf at bay.

He turned his back on them and strode away. The others followed him, Bentley glad to be at his rear, for he had plodded along tensely, expecting to feel the snag of a bullet in his back. Gorziatti was quite capable of shooting him from the rear and he wondered at the strange something that had prevented him from doing so.

But Bentley did not know what lay just beyond the next bend. The first hint of the danger came to him when Gorziatti plodded into a tremendous chamber and recoiled with an insane scream. Instantly the procession stopped dead and Gorziatti, running madly back

through the tunnel, collided full force with Bentley. Without hesitation, Bentley, suspecting a sudden attack from the man, swung his mallet-like right fist. It smacked with a dull thud on Gorziatti's jaw, sending him sprawling.

"So that's your game, is it, you snake!" the quartermaster growled.

With a prodigious bound, the quartermaster was upon him, his savage fingers clutching at his throat.

"Wait, Bentley!" Gorziatti screamed. "I didn't attack you! Look in the chamber! My God——"

His cries were cut short by a thunderous roar from beyond. Instantly a monstrous head with a long, gleaming tongue lolling from a glowing, cavernous set of jaws, appeared in the tunnel. Bentley looked up, appalled, and jerked erect. He shot his right hand into his pocket. His pistol spat in quick succession, sending missiles of destruction into the ghastly, terrifying head.

But he might just as well have fired into a stone-wall, for the slugs seemed to have no effect on the strange brute. He bent over, grabbed Gorziatti and yanked him to his feet. Turning quickly, he saw the men retreating in full flight, borne swiftly away, assisted by the powerful draft.

Gorziatti needed no urging to get into action. His big pistols literally shot out of the holsters and into his ponderous hands. They thundered a chorus of doom at the beast. Bentley emptied his own gun and then threw it into the terrifying jaws.

Realizing the futility of fighting such a brute, he turned on his heels and ran after the retreating men. As he went, he heard a horrible scream behind him. He looked over his shoulder in time to see Gorziatti being lifted high into the air in the jaws of the serpent-like creature. Gorziatti was fighting savagely like a man held in the crushing trunk of a wild bull elephant. Then the pirate went suddenly limp. Bentley shuddered violently.

Without pausing, he broke into a fast run to overhaul the fleeing men. With the draft at his back, he fairly flew over the tunnel floor and finally overtook the men as they entered the chamber they had recently passed through. Here they paused, panting and staring wildly with fright.

"What happened, Bentley?" Blodgett cried in alarm.

"Gorziatti!" the quartermaster panted. "The beast got him!"

"Serves him right!" mumbled Roberts, trembling. "But good Lord, what kind of a thing was it?"

"I only had a look at its head," said Bentley, regaining his wind. "Looked like a big snake!"

"Couldn't you kill it with bullets?" a man in the ranks piped oddly.

"I sent twelve shots at it," the quartermaster growled. "But they had no effect. Gorziatti also fired at it before the beast got him!" he paused for breath, and then added: "We've got to get by that thing, men," he continued, "if we ever hope to escape from this hole. Now follow me back—and don't run!"

CAUTIOUSLY they went back toward the doom-chamber, Bentley, Blodgett and Roberts leading the men. The place was as silent as a tomb now, except for the droning of the drafts. The quartermaster wondered if the beast had gone away, but when they finally approached the cavern, they saw a fearsome sight.

Gorziatti lay mangled on the floor at the entrance, his once huge frame a mass of bloody, torn flesh, in the jaws of the terrible beast. The thing was dead, its jaws clamped on its victim!

"It's dead!" Bentley cried, approaching closer. He eyed the bloody body of Gorziatti and then looked at the beast. Its head and long neck lay in the tunnel, a phosphorescent liquid oozing out of its face from the bullet holes that had eventually caused its death.

The quartermaster picked up the pirate's fallen pistols and jammed them in his coat pockets. Then, with an order for the others to follow him, he stepped over the dead things and entered the chamber ahead. He was appalled at the tremendous size of the creature. It was not a serpent as he had thought, but was a strange type of saurian with a barrel-like body and a long, snakey tail. It had four legs, the fore members being short and the rear long, like a long extinct dinosaur. He wondered where it came from and concluded presently that it must have emerged from the interior of the earth or had been locked in the grotesque under-sea world when the continent, on which it had lived, had submerged eons before. The thing looked as old as time itself. Were there more of them to be encountered?

They left Gorziatti where he lay, to bear company with the remains of the dawn-age men that were scattered about. Where other men had progressed to a finer degree of civilization, the pirate had maintained many of the savage instincts of his forebears. Therefore Bentley and the others felt that he hardly deserved a decent burial and Blodgett, the highest ranking man in the lot, could not bring himself to even mutter a prayer over the body of the man he so thoroughly despised.

But after leaving the death chamber, the tunnel began to ascend. Everyone was elated, for ascension meant a rise to shallow water. If it continued on to some shoal, there might be some kind of an opening through which they could escape. That was their hope, at any rate, but whether it would materialize or not was a matter only time and Providence could tell.

Hours later the tunnel broadened out into another tremendous cavern. The place was dimly lighted by the glowing walls and when they entered, their ghostly shadows danced like evil specters on every side. Some of the men, driven to near insanity by the sneer of doom, shrank from their own shadows and sobbed hysterically. Blodgett, too, was on the verge of complete breakdown. His nerve was snapping and his eyes had the look of a hunted beast. Roberts fared no better. His hands and lips trembled with an unnatural nervousness. But Bentley, a man of iron will and strength, kept masterful control over himself. It was his cool indifference to the inevitable that aided the others to go on.

To his surprise, Bentley found that there was little draft in this cavern. He remarked upon it to Blodgett but received only a weird cackle in reply.

"Buck up, captain," he grinned. "We're not dead yet!"

Blodgett eyed him furtively and hung his head. Bentley watched him for a moment and then glanced around the cavern. On a slab of polished rock near at hand he saw strange markings. He went to it quickly and found the slab covered with peculiar drawings of grotesque animals. In a mixture of vivid colors he made out the form of an elephant with long, up-curling tusks, and then he discovered a likeness of the beast that lay dead behind them. He turned away, satisfied that this labyrinth of caverns and tunnels had once been inhabited by a vanished race.

Quickly he searched the great cavern for the continuation of the tunnel, and found no outlet other than a small, round hole that would scarcely accommodate a man's shoulders. He bent over and found that a terrific suction of air ran into it. With a shrug he faced the men.

"Well, boys," he said calmly. "It looks as if we've

come to the end. The tunnel stops in this cavern, except for a small opening over there. Where that opening leads to is a matter for speculation. It might lead to the surface and it might lead to, well, even death would be better than life here . . ."

"Yes, death would be better," a man suddenly groaned. A murmur of approval ran through the crowd.

"Then you want to enter that hole . . . take a chance?" Bentley put it before them flatly.

"We'll do anything to get out, chief," said another with a stifled sob. "You lead the way. I for one, will follow you!"

"Do you think there's a chance, Bentley?" Roberts whispered, eagerly.

"I don't know, Roberts," replied Bentley with a shrug. We'll have to take a chance or stay here. Want to do it?"

Suddenly there sounded from somewhere overhead the deadened shriek of submarine sirens. Bentley jumped, startled, and a flash of hope caused his cheeks to color. Blodgett heard the sound and lifted his head in recognition.

The submarines from Norfolk had at last found their position and were searching the depths above for them! The shrieks came spasmodically in long, drawn-out wails that could be heard under water for many miles.

"They've come, boys!" shouted Bentley joyously. "They've come at last!"

"Yes, they've come all right," groaned a man sadly. "But if we cant get out, what good will they do us. We're not out yet, Bentley!"

Bentley sobered instantly, realizing the gloomy truth. No, they were not out yet and perhaps they could never get out. But he resolved to take a chance on that hole in the cavern wall. If it led to his doom, it would be as welcome as remaining cooped up in the cavern to go mad knowing that safety lay just beyond. He faced the men again.

"It's every man for himself now," he said. "Do whatever you wish. I'm going to risk that hole. Who wants to be first?"

A man guffawed loudly, sarcastically. Bentley recognized him as one of Gorziatti's closest cronies.

"Whattsa matter, mister quartermaster," the fellow shouted, "you afraid to go first?"

The quartermaster appraised him calmly and grunted.

"As an officer, I'm giving you all first chance to get out," he said firmly, ignoring the man's hostile attitude. "I ask again; who wants to be first?"

A member of the A-T 72's bedraggled crew stepped forward and stood before Bentley.

"I'll go, sir," he said grimly.

Bentley offered his hand and the fellow took it firmly.

"Better take off your coat and shoes," said the quartermaster, "and put on your diving apparatus. But remember, there'll be no return here. That suction will pull you through the tunnel and you'll be shot forward like a torpedo!"

"I don't care what happens now, chief," the fellow said bluntly and seriously, as he doffed his heavy coat.

Bentley helped him don the diving apparatus and then walked to the hole with him. Once again they shook hands and the man bent over the opening, stuck his head and shoulders into it and vanished. He shot out of sight as though some unseen hand had grasped his head and jerked him inward. There was a hissing roar to mark his passing from view.

When Bentley faced the crowd again, coats were being peeled off. Within a minute there was a mad scramble for the hole.

"Take your time, men!" Bentley bellowed.

But the eager underseamen paid no heed to him and fought for the chance to get into the hole. Bentley, Blodgett and Roberts stood aside, the quartermaster realizing the futility of trying to control the fear-drunk men. But he saw them vanish one by one and presently the last man bent over. He, too, vanished from view and the cavern echoed the roar that sucked him out of sight. Bentley shook his head sadly, wondering how many, if any of them, would survive the ordeal. Would they reach the surface through what might be an exit into the waters of the sea? Or would they be crushed to death by the pressure within the hole? It was a gamble with doom that the hole was anything but a death-trap, and the cards were stacked against them.

"It's your turn, Roberts," said Bentley suddenly. "I'll go through last. Here, I'll help you with your outfit . . ."

"Never mind, Bentley," said Roberts quickly and soberly. "I'll do it. You get yourself ready."

But the quartermaster turned to Blodgett. The captain seemed ready to break down completely. He stared at his subordinate blankly and Bentley reached forward suddenly to strip the man of his coat.

Blodgett recoiled and lashed out insanely with his fists. Bentley was taken aback by the sudden show of hostility and then realized that the captain was either afraid to enter the hole or had become completely hysterical. Acting on the spur of the thought, he snapped his fist back and let it go. Blodgett went down like a log.

Within two minutes he had him ready to enter the hole; then, with his own diving apparatus in place, he carried the captain toward it. Roberts paused there for an instant and then vanished. With racing blood, and a prayer on his lips, Bentley placed the captain's still form in the hole and clamped his great hands on his ankles. Slowly he edged his own and Blodgett's body into the suction.

BENTLEY'S first feeling when the suction took hold of him, was that of being grabbed by a tremendous force and hurled forward like a projectile. The pressure on his body was tremendous and it made his senses reel. Still, he managed to cling to the legs of Blodgett with one thing uppermost in his mind. That was, to save the captain from drowning should the tube-like tunnel actually carry them to water.

Before they had gone a score of feet, the skin had been scraped from his broad shoulders, his elbows and his legs from contact with the rough sides of the tunnel. His body seemed to flame with a burning sensation, but he managed to keep his diving helmet from the walls that surrounded him. He had not removed his shoes and was glad of it, for his toes scraped cruelly on the gritty rock.

Suddenly a terrific roar beat down upon him. He felt Blodgett's body being lifted upward and then his own. Vaguely he wondered if this was the end and steeled himself to an expected impact against a solid wall. But no such thing happened. Instead, he felt himself grow suddenly cold and he knew he was in water.

But where was the water? Was it in some cavern that was filled with the cold, almost frozen water at the bottom of the sea, or was he rising to the surface now? A tremendous, squeezing weight clutched him, causing him to cough violently. A stream of blood suddenly shot from his nostrils and spattered on the thick glass in the front of his helmet. He felt himself going upward rapidly, too rapidly, but there was no staying the terrible force that drew him on.

Madly he clung to Blodgett's ankles. The captain was regaining consciousness now and was kicking savagely. His left hand was kicked loose and a threshing foot caught him on the shoulder but he scarcely felt the blow. Then a great change seemed to come over him. A brilliant light penetrated the exposure in front of his

eyes. He felt hands clutching at his shoulders and then he lapsed into unconsciousness, every muscle and joint in his body aching and paining.

A half dozen air-filled life-rafts bobbed on the surface of the sea, with eager sailors scanning the choppy waters for the arrival of more bodies. Bentley, suffering from the bends, was at once placed in a decompression tank in the United States Submarine U-S 1001. Eventually he was placed on a cot in the craft's hospital and when he finally opened his eyes, he saw the sub's physician standing beside him. "Pills" nodded at him and smiled.

"Be quiet," he advised softly.

"Oh, I'm all right, doc," said Bentley, his body still aching. "The others . . . did any of them come up?"

The medico nodded his head in the affirmative.

"About a dozen . . . alive," he said bluntly. "Pressure and bends killed the rest."

"Blodgett . . .the captain," Bentley gasped. "Is he dead?"

"He'll be all right," the physician stated. "What happened down there?"

"Caught in a deep-sea current," said the quartermaster, "and sucked into some waterless cavern. Finally found a hole and took a chance on it. Drafts in the place kept the hole free of water by pressure. We crawled into it and trusted to luck to get to the surface. We must have been pretty close to the top or else the pressure of the water would have killed us all, it seems to me."

"Bottom's two hundred feet under here," the medico said. "But you're mighty lucky at that. Now you had better keep still awhile and we'll turn you loose."

"Just let me sleep the clock around, doc," Bentley smiled wanly, "and I'll be all right. By the way, How's the chief engineer . . . Roberts?"

"Pills" gave him a significant look and strode away. Bentley pulled the blankets over his head and went to sleep to the tune of droning Diesels as the sub ran smoothly along the surface.

THE END.

Cosmic Menace

By A. W. Bernal

(*Continued from page* 413)

been left behind also; perhaps it, too, was journeying among the stars.

Years passed and no longer were men awed at earth's voyage through the void. Billions of lights, gleaming from every conceivable place, dispelled the gloom of interstellar night. Giant space cruisers flew back and forth between the sheltered cities, gaining entrance and exit by means of large air-locks, that kept the absolute zero temperature of space out of the hot-house metropolises.

Although much of earth's packed millions had been killed in the terrible events of the past, there were more than enough left to justify the erection of domed cities wherever there was room.

Progress, advancement, the haste and bustle of commerce again held sway. The now matter-of-fact flight into infinity ceased to interest any but the scientists. They, glorying in the success of a stupendous achievement, were supremely happy.

Soon after leaving the solar system, the chill of space had demanded immediate attention. To keep earth's surface warm, the Titanic Brazilian Pit was efficiently covered and its heat, brought from the very center of the sphere, was piped to the various cities. Eventually a dozen wells had been sunk into the core of the globe and its inexhaustible internal fires tapped to supply warmth to the enclosed metropolises on the surface of the globe.

Heat was no longer a problem; nor would it be for countless eons to come.

One and only one fear hovered distantly in the minds of men. Every possible danger had been foreseen and provided for except one. Although earth's path seemed free of any straying meteors or the like, some day, somewhere, roving earth would meet another vagabond of space. Only too well did scientists know what happens when two speeding worlds collide. That fact alone marred the man-made paradise that was earth.

But at last even this problem was solved. The standing offer of two billion dollars for a practical anti-gravity screen was claimed by the Worldwide Science Corporation.

No longer did earth have to fear a disastrous meeting with some other space-wanderer. No longer did earth wheel uncontrollably through infinity. In each of thirty-five thousand metropolises, as rapidly as willing hands could finish them, were erected two great mile-square anti-gravity screens.

Now if danger lay ahead, earth's course could be deflected from its original line of flight by simply putting certain anti-gravity screens in operation. Man's last problem was overcome.

And now controlled earth, guided in her eternal flight by the hands of men, rushes on and on through the great void, seeking out the wondrous secrets of creation. . . .

THE END

The Giant Puffball

By Eugene Stowell

PROFESSOR HOFF was one of those rare men who was both a "pure scientist" and a keen business man. Every schoolboy, I suppose, knows of the many hybrid plants of which he was the originator. In the field of theoretical science he is well known for his work in regeneration and micro-dissection—those two very fascinating problems of modern biology. Many times have I gone into his laboratory at the State University and surprised him at his miscroscope, busily engaged in taking apart a single cell or injecting into the cell some chemical. More often, however, one could find him in the university greenhouse, working in a shaded section on his special hobby, the giant puffball; *Calvatia gigantea*, it is called by the botanist.

The giant puffball is the grand prize of the mushroom hunter. It is an excellent edible species, abundant, growing on lawns, pastures, and meadows. One of the most impressive features of this giant of its class is its tremendous size. It has been found in nature to grow to enormous dimensions; sometimes it has been found with a circumference of six or seven feet. But its size is not the most interesting feature of this freak of nature. It has great powers of regeneration. That is, the plant has a great propensity to reproduce any part of the huge oval sphere which is its edible part. This huge structure, which resembles a great snowball in color and shape, can be grown in the shade for a long time without turning black and shedding its millions of minute spores or single celled "seeds." This is accomplished by cutting part of the puffball off each day and allowing the plant to regenerate the removed part.

How the professor ever made his great mistake, I do not know. But make it he did. So great was his mistake that the reputation of the man for a long time was in the balance. The welfare of the community, itself, was, and still is, in danger. Perhaps the great man was so engrossed in the idea that he forgot the consequences which might follow. However that might be, it still remains that the unpleasant events which occurred in the greenhouse on Chapel Hill have not been accounted for up to the time of the publication of this article.

My first inkling of the experiment, the first inkling anyone had—for I was a great man's best friend—came to me in the following manner. I had been invited to the scientist's home for supper. This meal consisted of a dish made from a few slices of the giant puffball, on which the professor spent most of his time. After supper, the scientist invited me to his private laboratory in a most mysterious manner. It is unusual for Dr. Hoff to show any emotion, so that I had reason to be exceedingly curious about my trip to the laboratory with him that night. On his table was a wonderful research microscope with full dissecting equipment and a very unique injecting pipette, which could be used to inject small quantities of chemicals into the single cell. It was with this equipment that the great cytologist had made his contributions to the knowledge of the cell.

Dr. Hoff, who is a very small man, looked up at me with his pinpoint eyes on fire behind his great nose and said in a solemn voice, "You are now going to see something that no other man except myself has ever seen."

The doctor was right. With a movement, which would have put Napoleon to shame, the little man adjusted the microscope, turned on the lights, and then stepped back with a grand gesture. I believe that the importance of the discovery had gone to his head. I took one look and then another. What I saw seemed unbelievable. In the field of the microscope there could be seen two or three cells which had just emerged from the spore of the giant puffball. This was not the important thing, however, for the cells were in an actual state of division. One could see the nuclei in the cells break up into small particles; see these particles divide, and then watch half of them go to the opposite ends of the cell. A cell wall was then formed between the two groups of particles. These divisions followed one after the other until I saw a mass of cells, where there had been but two or three before. Not only were the cells dividing at a great rate, but the cells were of an enormous size.

Everyone is familiar with the rapid growth of the common mushroom. They often grow from a very small size to a full-grown toadstool within a few hours, but this spore of *Calvatia gigantea*, had it been given enough nourishment, would have developed into a giant puffball before my very eyes. I turned to the professor for an explanation. With a triumphant smile he gave his answer to the question in my eyes. "I have been working for years on this problem," he said. "By a careful study of the cell I have been able to discover a chemical which will increase the rate of cell-division a hundred times and at the same time increase the size of every cell. Had the cells you saw been given the right kind of nourishment, this division would have gone on until the puffball would have reached the size of a house. That is what I propose to bring about."

I DID not see the Doctor for several weeks because of an extended business trip I was forced to take. Nor did I hear from Dr. Hoff, for, like many men, he is a poor letter writer. When at last I could find time to call on him at his greenhouse, he greeted me as we greet a friend whom we know we can trust with a real secret. Without saying a word about his problem, he took me into the greenhouse and into the part of that structure which was shut off from excessive light and prying eyes. There stood the monster, for I know not what else to call it. One could see it expand and move as new cells were constantly being added to the bulk of the

huge oval thing. At that time the structure must have been at least ten feet in diameter and slowly but visibly it was expanding. Over the greenhouse there hung a sickly musty odor. The scientist explained that he had injected his chemical into the spore of a giant puffball and had given it nourishment and shelter in the greenhouse. He had, from time to time, taken some of the growing tissue off of the white, oval structure, and had thus prevented it from turning black, or rather brown, and sending out its spores.

So great was my awe of the enormity of the discovery and so overcome by a fear of this creature was I, a fear, which I could not explain, that I slept but little that night. In the morning a new fear came to me with a suddenness that left but one purpose in my mind. I must warn the professor before it was too late. But the professor did not need the warning. When I arrived, I learned that the poor fellow had also been up all night, watching the monster grow, until he had reached the same conclusion which I had come to.

"Doctor, you must get rid of this terrible thing," I said. "If you do not stop its growth, it will become so enormous that it will destroy the building, perhaps other things—maybe even human life!"

But the Doctor was far ahead of me. He looked at me with those disconcerting eyes of his and said, "My dear friend, you do not begin to see the terrible situation in which I have unwittingly placed myself. Come to the greenhouse with me; you will see for yourself."

The poor man had been very busy that morning. Around the glass walls of the greenhouse he had had erected what seemed to me to be much the same thing as a circus tent. We walked inside. All was dark, but everywhere there was that nauseating odor. When I became accustomed to the poor light, I could make out the outline of what had been the greenhouse. Here and there the glass was broken and a grey white substance protruded into the opening. The monster had grown too big for the building over night! And now and then the glass could be heard to crash and the ominous silence was broken. What terrible forces the scientist had let loose! Two men had been working at one end of the huge oval all the morning. But to no avail. Every shovel full removed was at once replaced by the thing.

A thought struck me, "Why not let the monster mature and send forth its spores? If it is left alone it will soon do that and the danger will be over." The professor looked at me as a drowning person might look at another giving well-intentioned, but impossible advice.

"My dear fellow," he said, sadly. "If the thing is allowed to shed its spores, the trouble will only have begun. Each spore will develop one of these monsters and these millions of plants will develop millions of spores just as quick in development as this monster is. To keep the thing growing will mean that it will grow to such a size that the buildings will be destroyed one after the other, that the whole town will be in danger. To let the thing shed those spores means a great danger to all of mankind. Think of the power exerted by a blade of grass which grows through a cement walk and then think of millions of this thing all over the land!" The poor fellow had tears in his eyes.

Still the monster grew. Steam-shovels, men with hand-shovels could not remove it. Like a flow of lava it expanded day by day. And underneath the ground the monster was at work. Those thread-like structures, which are to be found in the ground and which supply nourishment to the part of the puffball above ground, were stealthily pushing their way among the soil particles in search of food. Yards and yards the mass of strands grew each day. The soil itself—at least the part on the surface which contained decayed matter—became a mass of thread-like strands of living matter. The monster continued to grow so rapidly that at the end of the week the matter was known to the police and they at once took control of the thing. It was now necessary to close in the entire block which, before the advent of the terrible discovery, had been the location of the greenhouse and the biology building. These buildings were no more. Just as the slow progress of a lava flow goes over or through the things in its path, so the Monster, or Thing, as it was now called, went over or through everything in its path.

But the Thing was not solid as the stream of lava. Only grudgingly did it exert its power when it was necessary to force its way through a window or some other opening. Mostly it was content to go around trees and other ridged things in its path. But it was capable of exerting great force whenever necessary. Its density was not great, a fact which made it more powerful, as the police would soon find out.

From the beginning it was decided to keep the news away from the townspeople. It was for fear of a panic that the police forbade the people of the town to come up Chapel Hill. In reality, Chapel Hill was an island surrounded by the great river which wound about the foot of the incline on which greenhouse and biology building were built. As the entire island was the property of the university and as everyone knew of the peculiar experiments which sometimes were performed on the island, no one gave the recent isolation of the island any thought.

The police naturally thought of explosives as a means of ridding the world of this pest. And so it was that charges of T.N.T. were placed about the Thing and set off. But that availed nothing. The explosions merely tore holes in the soft tissue, which immediately closed up with a sickening sound.

And the thing grew.

By this time the Monster had practically covered the island and Dr. Hoff was at his wits'-end. The police became more disturbed. But the Thing continued to grow until it had the entire island covered with the mass.

There came to the minds of some of us the question whether or not the Monster would not send forth his spores in spite of our efforts. For, as the Thing approached the water, it gradually ceased to respond to the cuts which were given it.

It was the professor who finally solved the problem. He came rushing into my office in the city with news that he had been relieved of his worries. For a moment I thought that he had lost his mind, but his words convinced me that he had really been relieved of the responsibility of having brought the Monster into the world.

It was a simple matter. The Thing had merely used up all the food on the island and was even then at the mercy of the authorities. For years, however, it has been necessary to keep a close watch on the island and exterminate all puffballs which appear upon it. There is still danger that one of these may come from the thread-like portions of the Monster left underground.

But the real cause for uneasiness lies in the fact that the formula for the chemical which was invented by Dr. Hoff was stolen from him. He is not certain just what plants or animals can be made to regenerate from cells in which this chemical has been injected. Owing to the danger involved in the experiment, he had never tried it out after the experiment which nearly proved so disastrous.

THE END.

Editorials from Our Readers

The following editorials which were awarded honorable mention were crowded out of the last AMAZING STORIES Quarterly, and we are therefore printing them herewith, although the Readers' Editorial Contest is closed.

Scientifiction and Thought

WHAT is thought? We have arbitrarily distributed it in several classifications, but, in the final analysis, there is no difference. We classify our thoughts as conscious, instinctive, imaginative, reasoning and what we are pleased to term inspired thought. All thinking is induced by something that attracts our attention. Instinctive actions are the result of thought as much as premeditated actions but, in the former case, the mental images pass through our brains with such rapidity that they leave no impression on our consciousness. If we stop to analyze, we will find that the thoughts that resulted in the so-called instinctive action were induced through one or more of our senses. It is impossible for us to entertain a mental image, that is not related to something that we have at some time perceived with those senses. Therefore it can be seen that all thought is induced.

It cannot be denied that more thought is generated, or induced, by reading than by any other method. We note the thousands of activities that surround our daily lives, with but a passing interest in most cases. We may pass a thing a thousand times without giving it a second thought but, let us read of it in an article or story, that has been written in an entertaining manner, and our interest becomes at once aroused. Then we will look upon the heretofore commonplace with renewed interest.

Writing is by far the best medium of thought transference. The mental images induced in our mind by the spoken word pass through our brains too rapidly to make a lasting impression, whereas the written word may be read over again and reviewed, thus making the images stand out more clearly. Also, in thus reading the thoughts expressed by the writer, a different line of thought is many times induced in our own brain; we think beyond the expressed thoughts of the writer.

We are prone to belittle the imagination of fiction writers. We laugh disdainfully at seemingly fanciful mental pictures; perhaps even going so far as to brand them as the product of a distorted imagination. If, as has been the case, these fanciful images develop into reality, we at once forget our former attitude and call the author an inspired genius.

There is no uncertainty about the value of purely technical books. Real knowledge may be obtained through the study of works which are the result of years of study and experimentation, but this study is not alluring to the mind that has not first become imbued with a desire for the knowledge contained therein. We read fiction for entertainment. Romance and adventure have a natural appeal that is as old as the human race. A thrilling account, especially of such adventure as we have never ourselves experienced, makes a lasting impression on our mind; it induces thought along different lines from our ordinary mental processes. If the story is along scientific lines our minds are induced to think in scientific channels and a desire to know more is born. This leads to study. A scientific observation always seems to create a desire for refutation or corroboration on the part of the reader, as shown by the criticisms sent in to the editor.

From the foregoing it will be seen that scientifiction induces more thinking along scientific lines, which results in more general knowledge. Every invention was first a mental image in the mind of the inventor. If more mental images are induced, it naturally follows that there will be more inventions and consequently further advancement. Thus scientifiction has a value that is far beyond mere entertainment.

John Francis Kalland,
1622 Beech Street,
St. Paul, Minn.

Aeroplanes and the Mass

A COMPARATIVELY short time ago, the majority of people scoffed at the idea of the horseless carriage coming into practical use; the thought of a flying carriage was beyond being scoffed at—it was preposterous! The way of the air pioneer was indeed hard, and he might just as well have called for assistance in building another Tower of Babel, as in the construction of a flying machine.

But the wheels of progress, propelled by such men as the Wright Brothers, Zeppelin, Lindbergh, Byrd, and a host of others, have ground prejudice and ignorance into the dust. The unbelievers have been converted by seeing the vision of aircraft take form and become reality.

Respected by the mass, the air inventors have taken their rightful place in the world's affair. An anxious and credulous public await the result of their labors; ready to assist them financially; to encourage them with their praise and place them side by side with famed generals and illustrious political leaders.

Already, countless improvements have been made, for with such encouragement, the advancement of aviation is assured. Many more inventions are in the process of construction in numerous air laboratories; and perhaps most important of all, some lie dormant, figuratively speaking, in the brain cells of the coming generation. These, when called into being, may astound and revolutionize the world. Ground transportation may become almost as obsolete as non-motor or non-mechanical traffic at the present time. The inventors may conquer the laws of gravity in their quest for a plane which can take the place of the automobile. In the face of what has occurred in the past under adversity, the world can well expect the coming years to be more productive of change than was the past century.

Thousands of minds will be concentrated on aviation, thousands of hands will be laboring to improve it. How can the most base cynic predict anything but a century of progress, dating from Colonel Charles A. Lindbergh's epochal flight across the Atlantic?

Robert Kehoe,
166 Warren Road,
San Mateo, California.

Why "Amazing" Stories

MANY devotees of Scientifiction have been more or less annoyed by the fact that their favorite magazine calls itself AMAZING STORIES. In their opinion, the magazine is cheapened by this title. Yet, what more appropriate name could be applied?

Let us define this word, "amazing". Webster says: ". . . astonishing, confusing; confounding with fear, surprise or wonderment."

Firstly, we will consider the question of astonishment: AMAZING STORIES deals with science; and science is "the searchlight of truth." Truth is more wonderful (astonishing) than fiction; and so, fiction containing science, i. e., truth, is more wonderful (astonishing) than mere romance. This is not a play upon words. Science and truth go hand in hand; what little we know of truth is taught us by science.

The word "confusing" is also an apt one—although this casts no reflection upon the magazine; for what is more confusing than science? Science, in seeking the truth about life, force, matter, light, etc., must build up its sets of theories about atoms, electrons, quantum, vibration, evolution, and so on. And many of yesterday's theories have been shattered in the light of today's knowledge; and many of today's are doomed to a like fate. The effect is, to say the least, confusing.

But science is striving onward, ever nearing its goal—truth—astonishing and confusing us with its discoveries and theories. And AMAZING STORIES is keeping pace, keeping us in touch with science, through the medium, Scientifiction.

The word "fear" as applied to amazement, is open to conjecture. Certainly, it would be hard, if not impossible, to find a case in which one was used to describe the other. "Surprising"—mildly astonishing—is so closely related to the latter as to make explanation superfluous. So, lastly, we come to "wonderment"; and here we have the very essence of AMAZING STORIES. Perhaps the greatest value of the magazine lies in its ability to make the reader wonder—to burst the shackles of smug complacency.

Those who object to the name "astonishing," should remember that scientific theories and truths are also objected to, by those who find them too astonishing, confusing, amazing. The majority (the majority are never right) probably never will take kindly to science, the iconoclast, the blaster of their sacred ideals and tin gods. Science, man's great benefactor, has always been ridiculed and persecuted, from Aristotle to Darwin, from Galileo to Einstein, by those who "go in throngs."

And so, we find that AMAZING STORIES is everything the name implies. Can those who wish the name changed, think of a more proper one?

Joseph L. Collier,
34 South Fifth Street,
Hudson, N. Y.

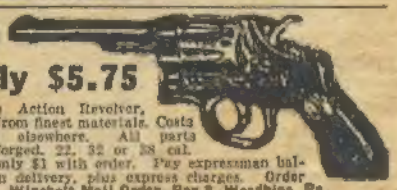
$—ALWAYS HAVE LUCK!—$

Unlucky in Money, Games, Love or Business? You should carry a pair of genuine MYSTIC BRAHMA RED LIVE HIGHLY MAGNETIC LODESTONES. Rare, amazing, Compelling, Attractive, these LIVE LODESTONES are carried by Occult Oriental people as a POWERFUL LUCKY CHARM, one to prevent Bad Luck, Evil and Misfortune, and the other to attract much Good Luck, Love, Happiness and Prosperity. Special, only $1.97 for the two. With free full instructions. Pay postman $1.97 and 15c postage on delivery. Satisfaction or money refunded. You can be LUCKY! Order yours TODAY!

Dept. 1852, P.S. BUREAU, General P. O. Box 72, BROOKLYN, N. Y.

NOTICE! We absolutely GUARANTEE these genuine Mystic Brahma Lodestones are ALIVE! Just what you want, for they are the Real Thing—POWERFUL HIGHLY MAGNETIC!

Sale



Only $5.75

Double Action Revolver, made from finest materials. Costs $12.00 elsewhere. All parts drop forged. 22, 32 or 38 cal. Send only $1 with order. Pay expressman balance on delivery, plus express charges. Order today. Winebolt Mail Order, Box 3, Woodbine, Pa.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, OF AMAZING STORIES QUARTERLY, published Quarterly at Jamaica, New York, for April 1, 1931.

State of New York } ss.
County of New York }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Dr. T. O'Conor Sloane, who, having been duly sworn according to law, deposes and says that he is the Editor of the AMAZING STORIES QUARTERLY and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, Radio-Science Publications, Inc., 381 Fourth Avenue, New York.

Editor, Dr. T. O'Conor Sloane, 381 Fourth Avenue, New York.

Managing Editor, Miriam Bourne, 381 Fourth Avenue, New York.

Business Managers, None.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.)

Radio-Science Publications, Inc., 381 Fourth Avenue, New York City.

B. A. Mackinnon, 225 Varick Street, New York.

H. K. Fly, 225 Varick Street, New York.

R. B. Asmus, 551 Fifth Avenue, New York.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

T. O'Conor Sloane, Editor.

Sworn to and subscribed before me this 27th day of March, 1931.

(Seal) Joseph H. Kraus.

(My commission expires March 30, 1931.)

Your Viewpoint

Mr. Vincent and Mr. Campbell Will Answer These.

Editor, AMAZING STORIES QUARTERLY:

Having just finished the Spring Quarterly, I have a few comments to make:

1. In "Islands of Space," the author describes the "light metal" as being made of photons of energy. He also describes the molecular ray as causing the molecules of matter to move. Then he uses the ray to move the light metal. The light metal not being made of molecules would or should remain unaffected. Can you explain this?

2. Harl Vincent in "Invisible Ships," says the invisible ships were made visible by means of a small black box. The ships then appeared violet. If the device used was uranium glass, the ultra-violet rays he speaks about would appear green. The author does not give any explanation.

Martin Schleicher,
411 East Fourth Street,
Mt. Vernon, N. Y.

(We would like to get an answer to your query from the author of the "Islands of Space," and we may yet hear from him. The trouble is that he is now in Europe, so it is hard to get an answer for you from him. We have just received the interesting explanation given below, from Mr. Vincent, who is an engineer with one of the great engineering companies of the country.—EDITOR.)

Harl Vincent Writes:

It is unfortunate that Victor Masters did not explain in "Invisible Ships" the mechanism of his "little black box." Obviously, he was doubtful of his captain's ability to grasp the technical details and so did not describe the method used in making the ships of the Martians visible to the human eye.

The ships were made invisible by the use of molecular wave motions which were of such nature that no visible light was reflected, only the ultra-violet. It therefore became necessary to rectify or transform these ultra-violet radiations so that the ships could be seen. Had he used any of the uranium compounds, as suggested by the reader, the images would appear greenish in hue as he states. However, he would hardly use such a crude and unsatisfactory method. The salts of uranium and the platino-cyanides fluoresce when subjected to the radiations at the ultra-violet end of the spectrum and this fluorescence is green in color. Moreover, the images would be hazy and not at all distinct if fluorescence were resorted to for the transformation. The question of color might be solved by using other media than those mentioned. Chlorophyl, for instance, has been used in experiments where sunlight was condensed on a bottle of the substance by means of a lens and a cone of blood red color appeared. Other colors have been obtained with different fluorescent substances, so that the violet hue might easily be obtained. But the image would still be more or less indistinct.

In his knowledge of the super-science of the future time in which the story was laid, Victor Masters would use a far superior method and one equally simple to an experimenter of his ability. He would obtain a direct image, clear and distinct, by heterodyning two separate frequencies filtered from the ultra-violet band and producing a "beat" frequency in the visible range much as the super-heterodyne radio produces an audio frequency by superimposing one radio frequency on another of slightly different value.

To illustrate: The visible range of the spectrum is one octave, from approximately 4,000 to 8,000 Angstrom units wave length. The ultra-violet band is five octaves in extent, from about 136 to 4,000 Angstrom units. He, therefore, has a wide range of frequencies that he can work on. Expressed in frequencies, the visible range is from about 375 million million cycles to 750 million million, the latter frequency being approximately that of visible violet. The ultra-violet ranges from 750 million million to 22,000 million million cycles for the entire band. In that wide range, Victor was able to choose and filter out two separate frequencies that were, say, 700 million million cycles apart. These might have been 1,000 million million cycles and 1,700 million million cycles, for the sake of argument, and if properly "mixed" in his little black box would produce a "beat" or heterodyne frequency of 700 million million cycles (the difference between the two values) and this would produce a visible image of violet color.

As to the exact method used by the young ray operator in filtering out the separate frequencies and superimposing one upon the other to obtain the visible "beat" frequency we must remain in the dark. Developments of the future might easily make this possible. Photo-electric cells are able to detect ultra-violet light and are in extensive use at the present time, and if vacuum tubes can ever be developed to oscillate at the enormously high frequencies mentioned, the thing is solved, at least in its general theory.

Of far greater difficulty is the problem of making metals invisible as was done by the Martians. However, during my years of engineering work I have seen so many seemingly impossible things accomplished that I no longer class any scientific achievement as beyond the range of possibility. And I venture to predict that many of these imaginings of the writers of scientific fiction will become actual accomplishments within the century, not excluding the possibility of landing a rocket ship on the surface of the moon.

Harl Vincent.

An Encouraging Presentation for the Editors.

Editor, AMAZING STORIES QUARTERLY:

Although I have read AMAZING STORIES since September, 1928, I have never written to tell you how much I have enjoyed it. Of all the stories you've printed, I think the "Skylark" stories are the best and I would like to have them in book form as no doubt many other readers would, too.

The Interplanetary issue of AMAZING STORIES Quarterly was the best one you've put out up to now and I think that you should have an all Interplanetary Quarterly besides the regular AMAZING STORIES Quarterly.

The best story in the Quarterly was "Islands of Space," which in some respects surpassed the "Skylark" stories and I think that this is the best compliment that I can pay any story. I have missed such stories as the "Moon Pool," "A Columbus of Space," "The Second Swarm," and other stories of which I have read much favorable comment in the Discussions of AMAZING STORIES Monthly, and I would like to see these stories reprinted in the monthly or put out in small booklets at about twenty-five cents apiece. The "Moon Pool," being a serial, would take the entire booklet, but "A Columbus of Space" and "The Second Swarm" could be put in one booklet or on an average of two reprinted stories a book, except in the case of a serial or a rather long story.

I hope you will keep up the fine work and keep "our" magazine in the lead of scientifiction magazines.

Arthur Schaufelberger,
East Islip,
Long Island, N. Y.

(We have reasons to hope that the Skylark stories will appear in book form. They met with very wide appreciation from our readers. We cannot carry out, for the present at least, your suggestions which are well thought out, but there is no telling what we may do in the future. We certainly shall do our best to keep "our magazine" in the front. Few people realize the amount of work and of thought required by the Editors to bring out this publication. It has had one pleasant effect upon our staff: namely, we are rather proud of our magazine, although we realize to the fullest extent the very formidable difficulties incident to making it what we want it to be. Such letters as yours make us feel that we have good friends, and we get so many letters like it that we can claim many of them.—EDITOR.)